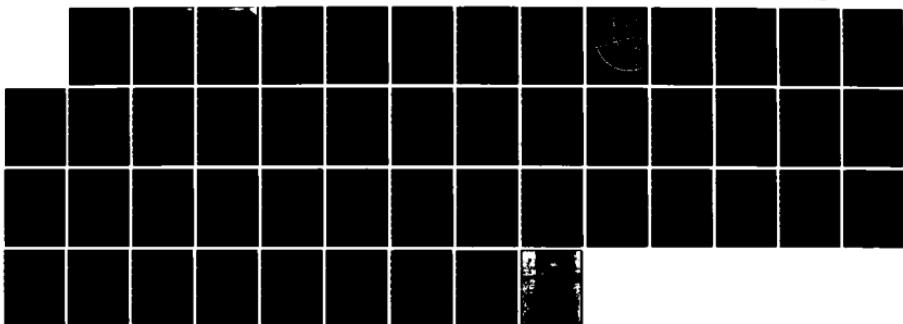
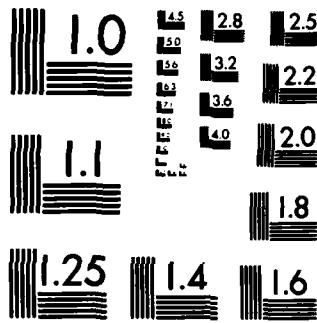


AD-A144 786 19320BT MLRS MISSILE NUMBER 426 497 392 473 442 ROUND 1/1  
NUMBER V608/AV-13 T. (U) ARMY ELECTRONICS COMMAND WHITE  
SANDS MISSILE RANGE N MEX ATMO. D C KELLER JUL 84  
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MICROCOPY RESOLUTION TEST CHART  
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DR 1349  
Jul 84

AD

AD-A144 786

METEOROLOGICAL DATA REPORT  
19320BT MLRS  
Missile Number 426, 497, 392, 473, 442  
Round Number V608/AV-13 thru V612/AV-17  
2 July 1984

by

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Program Support Coordinator  
Phone Number (505) 679-9568  
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ATMOSPHERIC SCIENCE LABORATORY  
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM  
UNITED STATES ARMY ELECTRONICS COMMAND

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 19320 BT MLRS, Missile Number 426, 497, 392, 473, 442, Round Number V608/AV-13 thru V612/AV-17 are presented in tabular form.		

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## INTRODUCTION

19320BT MLRS, Missile Numbers 426, 497, 392, 473, and 442, Round Numbers V608/AV-13 thru V612/AV-17, were launched from LC-33, White Sands Missile Range (WSMR). New Mexico, at 1318:47, 1318:52, 1318:56, 1319:01, and 1319:05 MDT, 2 Jul 84. The scheduled launch times were 1300 MDT with a 4.5 second separation.

## DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

### 1. Observations

#### a. Surface

(1) Standard surface observations to include pressure, temperature ( $^{\circ}\text{C}$ ), relative humidity, dew point ( $^{\circ}\text{C}$ ), density ( $\text{gm}/\text{m}^3$ ), wind direction and speed and cloud cover were made at the LC-33 Met Site at T-0 minutes.

(2) Speed and direction from one anemometer was provided in the launch control room.

#### b. Upper Air

(1) Low level wind data were obtained from pilot-balloon observations at:

#### SITE AND ALTITUDE

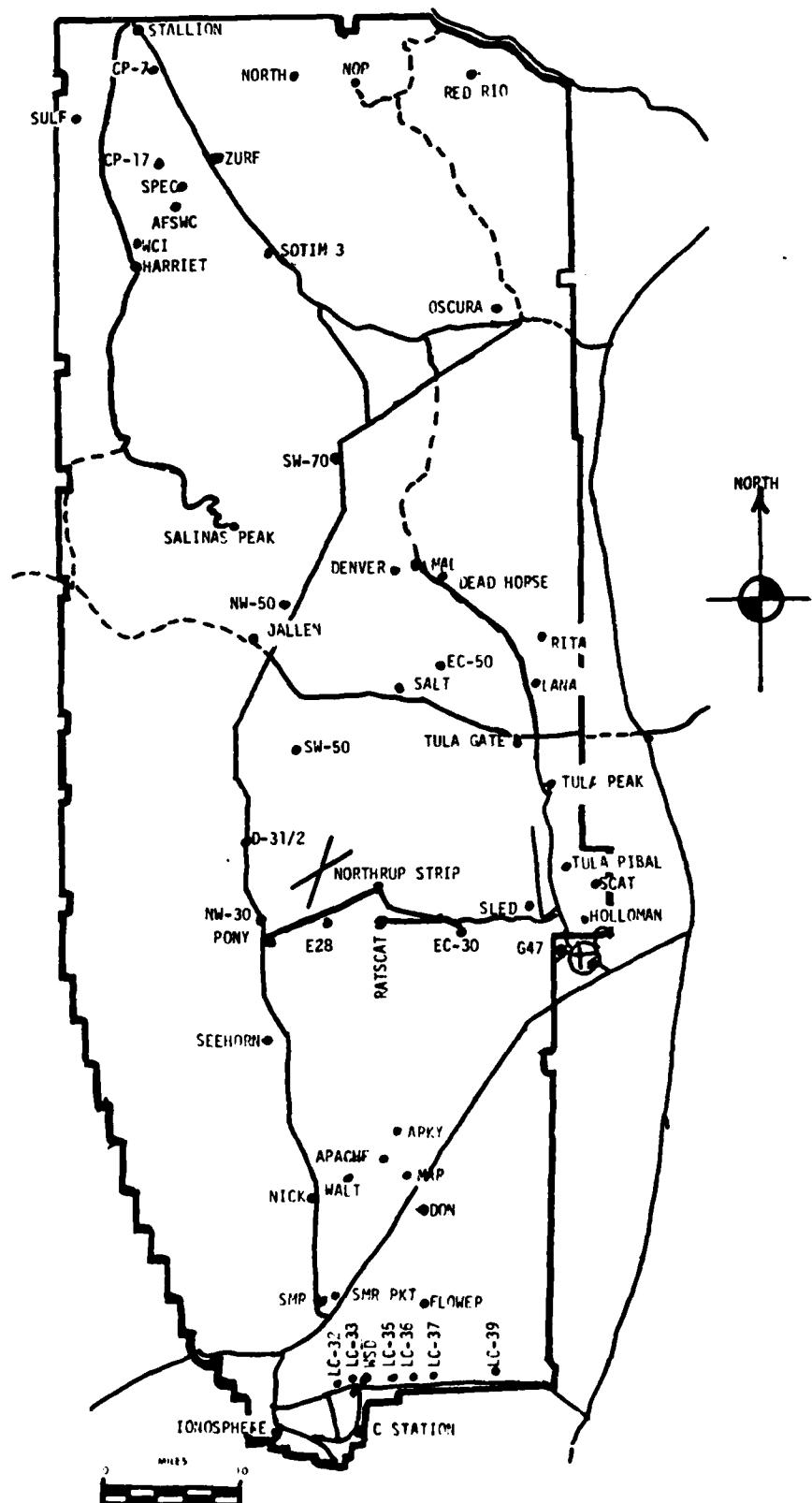
LC-33 2 km

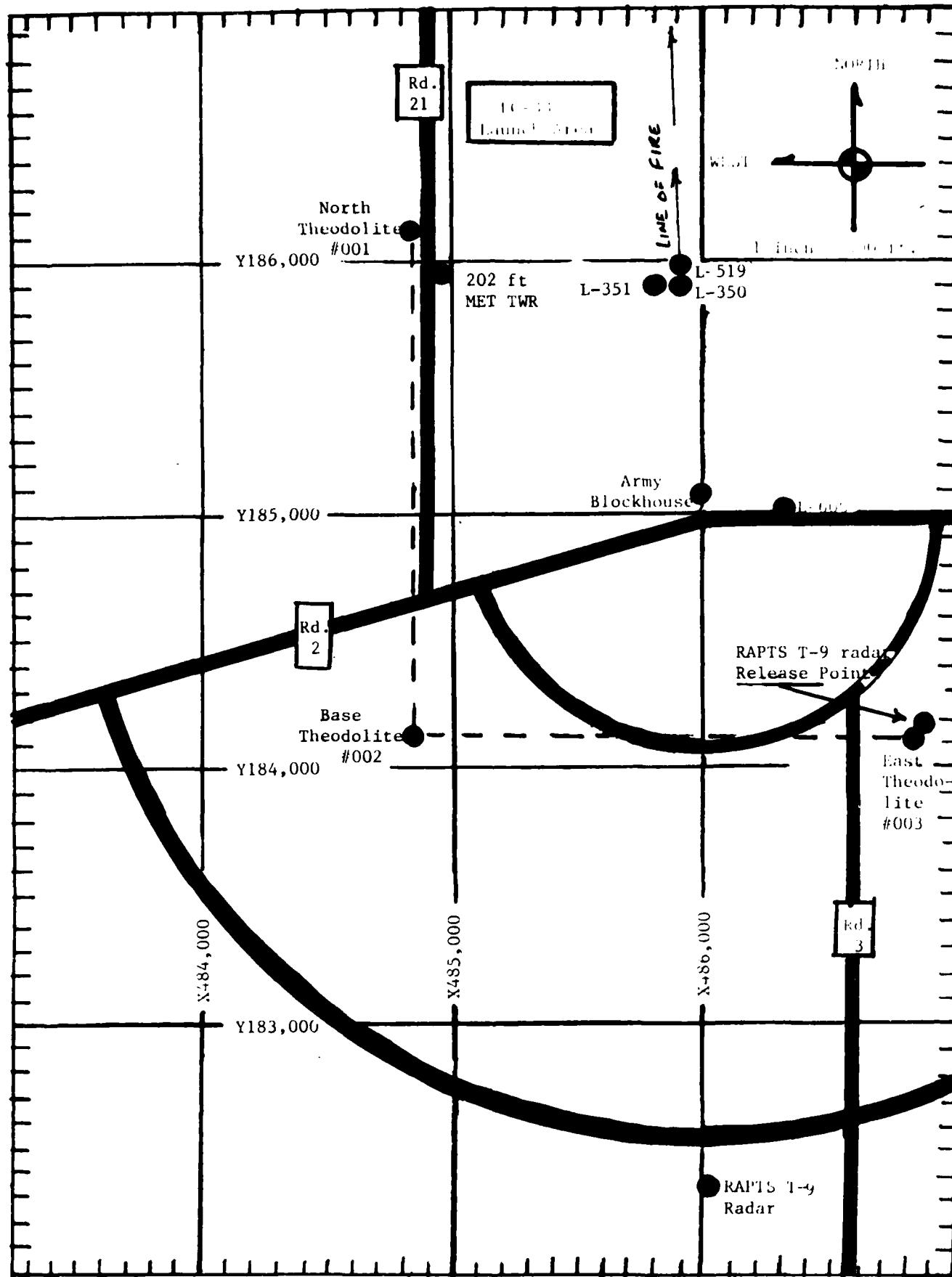
(2) Air structure data (rawinsonde) were collected at the following Met Sites.

#### SITE AND TIME

WSD 1000, 1130 and 1319 MDT  
SMR 1000, 1130 and 1319 MDT  
DON 1000, 1130 and 1319 MDT

## WSMR METEOROLOGICAL SITES





مکالمہ ایڈنٹیٹ

SYNTHETIC CATALYST

TIME: MDT	1319		
DRY BULB TEMP.	32.6		
WET BULB TEMP.	20.1		
WET BULB DEP.	12.5		
Dew Point	14.4		
RELATIVE HUMID.	33		

## PROJECT SURFACE OBSERVATION

TABLE 2

DATE H.D.T.	TEMP. F.D.S. °C	RELATIVE HUMIDITY %	DEW POINT °C	SENSITIVITY GR/MIN	WIND DIRECTION deg. In	WIND SPEED kts	CHARACTER	VISIBILITY
1319	878.9	31.5	14.2	35		180	12	35

OBSTRUCTIONS TO VISIBILITY	CLOUDS						REMARKS
	1st LAYER ANT	TYPE	HGT	2nd LAYER ANT	TYPE	HGT	
	1	CB	6500	1	AC	12000	4
							CS 25000 CB E MOVT UNKN

## PSYCHROMETRIC COMPUTATION

TIME:	MDT	1319	
DRY BULB TEMP.		31.5	
WET BULB TEMP.		19.7	
WET BULB DEPR.		11.8	
DEW POINT		14.2	
RELATIVE HUMID.		35	

TABLE 3

## LAUNCH AREA PILOT-BALLOON MEASURED WIND DATA

02 July 1984

LC-33 RAPTS T-9 RADAR WSTM X= 486,037.24 Y= 182,350.16 H= 3977.30

TIME (MDT) LAYER MIDPOINT METERS AGL	1223 MDT		1246 MDT		1324 MDT	
	DIR DEGS	SPEED KNOTS	DIR DEGS	SPEED KNOTS	DIR DEGS	SPEED KNOTS
SURFACE	190	03	200	05	180	04
150	112	01	MISG	MISG	MISG	MISG
210	145	06	136	06	MISG	MISG
270	158	07	145	09	151	09
330	133	04	154	12	150	07
390	150	06	151	08	127	09
500	153	06	158	06	145	07
650	161	07	161	07	164	06
800	155	07	169	04	171	10
950	130	07	164	06	172	08
1150	133	03	169	04	182	06
1350	167	04	276	01	223	04
1550	241	04	235	08	248	05
1750	238	07	259	11	269	14
2000	266	11	276	12	283	10

ALL DATA OBTAINED FROM RAPTS T-9 RADAR TRACKED PILOT-BALLOON OBSERVATIONS

TABLE 4

AIMING AND T-TIME COMPUTER MET MESSAGE DATA  
2 July 1984

WSD 1000 MDT		SMR 1000 MDT		DON 1000 MDT		WSD 1130 MDT	
METCM1324064		METCM1325064		METCM1326063		METCM1324064	
021600122882		021600122882		021600123880		021750122881	
00238004	30020882	00249004	30140882	00320014	30100880	00320008	30350881
01293006	29910872	01285007	29960872	01317015	29890870	01313008	30170871
02278005	29630847	02290010	29650847	02293016	29540845	02348006	29900847
03302011	29330809	03311013	29360809	03299015	29200807	03285008	29410809
04367015	29100763	04363013	29170763	04386011	29160761	04423008	29160763
05440009	28780719	06440011	28810719	05448009	28770718	05466008	28780719
06495010	28400677	06484011	28380678	06500010	28360676	06530011	28380678
07579008	27990638	07588009	27980638	07569009	27980636	07599010	28090638
08020011	27620600	08639011	27580600	08638012	27600599	08035009	27690600
09078014	27250564	09064014	27190564	09067014	27220563	09081011	27290564
10104007	26940529	10092012	26860529	10079012	26860528	10122005	26910530
11011006	26580497	11067015	26520497	11079009	26490496	11187003	26570497
12117005	26190451	12515002	26120451	12506003	26130450	12453006	26190451
SMR 1130 MDT		DON 1130 MDT		WSD 1319 MDT		SMR 1319 MDT	
METCM1325064		METCM1326063		METCM1324064		METCM1325064	
021750122881		021750123880		021930122880		021930122880	
00213006	30450881	00302013	30410880	00267008	30670880	00320008	30520880
01301009	30090871	01241008	30080870	01291008	30440870	01319013	30320870
02322008	29760847	02266010	29760845	02289007	30050846	02329011	30100846
03323009	29390809	03311011	29390807	03327008	29680808	03367008	29730808
04415008	29100763	04425011	29160762	04427006	29240763	04427006	29280763
05499010	28800719	05486009	28830718	05530012	28860719	05520014	28870720
06541010	28420678	06537010	28440677	06585011	28440678	06633010	28510678
07597011	28030638	07617010	28040637	07021008	27990638	07035011	28080638
08044010	27640600	08047011	27650599	08070010	27540600	08080011	27630601
09111010	27280564	09100011	27260563	09098008	27220564	09096007	27260564
10128007	26980530	10072006	26910529	10018006	26960530	10628006	26980530
11152005	26680497	11108001	26540496	11542007	26660497	11552007	26720497
12454007	26060451	12474007	26190450	12463008	26300451	12468009	26300452
DON 1319 MDT							
METCM1326063							
021930123879							
00320012	30690879						
01316014	30430869						
02304010	30060845						
03332009	29670807						
04407007	29200762						
05547010	28860718						
06624009	28500677						
07008009	28070637						
08077009	27650599						
09098008	27290563						
10632005	26980529						
11562006	26700497						
12476011	26380451						

STATION ALTITUDE 1000 m F.F. 1951  
FILE # 4  
REFERENCE NO. 1000 NDT

SPOT ELEVATION LEVEL DATA  
1000 NDT  
WHITE SANDS

TABLE 5

REFESSIONAL NUMBER	REFESSIONAL ALTITUDE MILLIMETERS MSL F.F.T.	REFESSIONAL DRAFT POINT CENTIMETERS	REFESSIONAL AIR PRESSURE PASCALS	REFESSIONAL REL. HUM. PERCENT
880.0	7600.0	75.0	14.2	51.0
870.0	6341.0	21.0	13.9	54.0
860.0	5072.0	21.3	12.0	55.0
810.0	4219.0	19.5	11.3	47.0
761.0	2843.7	15.4	5.6	52.0
700.0	11424.0	11.5	3.3	57.0
480.0	11265.5	6.1	3.2	42.0
650.0	12349.6	5.9	3.2	27.0
590.0	14706.0	1.9	-1.0	81.0
550.0	15527.0	1.2	-1.0	88.0
510.0	18509.0	-1.5	-3.5	20.0
500.0	19465.2	-2.5	-2.1	99.0
660.0	21309.7	-11.8	-14.5	80.0
450.0	21807.0	-11.1	-17.1	61.0
440.0	22461.0	-11.2	-23.6	75.0
490.0	22076.9	-16.0	-27.0	41.0

GEODETIC COORDINATES  
12°40'06" LAT DEG  
106°47'03" LON DEG

STATION: LITTLETON 7000' ALT  
2 JULY 26 1950 NO. 258 10000 NDT

Upper Air Data

GEODETIC COORDINATES  
35°00'45" LAT DEG  
106°07'35" LONG DEG

TABLE 6

DEPARTMENT	DEPARTMENT	AEROPHYSICS	ATMOSPHERE	GROUND	PERCENT	CW/CUBIC	SOUND OF	DIRECTION	SPEED	WIND DATA	INDEX
DEPARTMENT	DEPARTMENT	WILLIAMS	WILSON	RENTICOANE	PERCENT	WATER	KNOTS	DEGREES (TN)	KNOTS	REFRACTON	
800.0	800.0	14.2	51.0	102.9	675.7	12.7	4.1	1000297	1.000297		
801.0	801.0	14.2	51.1	102.4	675.0	12.4	4.1	1000297	1.000297		
802.0	802.0	14.2	51.1	101.0	673.0	14.0	4.0	1000293	1.000293		
803.0	803.0	14.2	51.1	100.7	670.0	152.5	5.8	1000298	1.000298		
804.0	804.0	14.2	51.1	100.4	669.4	157.0	4.8	1000293	1.000293		
805.0	805.0	14.2	51.1	100.1	668.0	166.0	8.7	1000279	1.000279		
806.0	806.0	14.2	51.1	99.8	667.0	176.0	11.4	1000271	1.000271		
807.0	807.0	14.2	51.1	99.5	666.2	185.4	12.1	1000266	1.000266		
808.0	808.0	14.2	50.8	99.2	666.2	195.4	12.1	1000258	1.000258		
809.0	809.0	14.2	50.6	97.7	93.0	194.8	15.1	1000251	1.000251		
810.0	810.0	14.2	50.6	97.4	91.0	194.8	15.1	1000251	1.000251		
811.0	811.0	14.2	50.6	97.1	91.0	194.8	15.1	1000251	1.000251		
812.0	812.0	14.2	50.6	96.8	91.0	194.8	15.1	1000251	1.000251		
813.0	813.0	14.2	50.4	96.5	91.0	194.8	15.1	1000251	1.000251		
814.0	814.0	14.2	50.4	96.2	91.0	194.8	15.1	1000251	1.000251		
815.0	815.0	14.2	50.4	95.9	91.0	194.8	15.1	1000251	1.000251		
816.0	816.0	14.2	50.4	95.6	91.0	194.8	15.1	1000251	1.000251		
817.0	817.0	14.2	50.4	95.3	91.0	194.8	15.1	1000251	1.000251		
818.0	818.0	14.2	50.4	95.0	91.0	194.8	15.1	1000251	1.000251		
819.0	819.0	14.2	50.4	94.7	91.0	194.8	15.1	1000251	1.000251		
820.0	820.0	14.2	50.4	94.4	91.0	194.8	15.1	1000251	1.000251		
821.0	821.0	14.2	50.4	94.1	91.0	194.8	15.1	1000251	1.000251		
822.0	822.0	14.2	50.4	93.8	91.0	194.8	15.1	1000251	1.000251		
823.0	823.0	14.2	50.4	93.5	91.0	194.8	15.1	1000251	1.000251		
824.0	824.0	14.2	50.4	93.2	91.0	194.8	15.1	1000251	1.000251		
825.0	825.0	14.2	50.4	92.9	91.0	194.8	15.1	1000251	1.000251		
826.0	826.0	14.2	50.4	92.6	91.0	194.8	15.1	1000251	1.000251		
827.0	827.0	14.2	50.4	92.3	91.0	194.8	15.1	1000251	1.000251		
828.0	828.0	14.2	50.4	92.0	91.0	194.8	15.1	1000251	1.000251		
829.0	829.0	14.2	50.4	91.7	91.0	194.8	15.1	1000251	1.000251		
830.0	830.0	14.2	50.4	91.4	91.0	194.8	15.1	1000251	1.000251		
831.0	831.0	14.2	50.4	91.1	91.0	194.8	15.1	1000251	1.000251		
832.0	832.0	14.2	50.4	90.8	91.0	194.8	15.1	1000251	1.000251		
833.0	833.0	14.2	50.4	90.5	91.0	194.8	15.1	1000251	1.000251		
834.0	834.0	14.2	50.4	90.2	91.0	194.8	15.1	1000251	1.000251		
835.0	835.0	14.2	50.4	90.0	91.0	194.8	15.1	1000251	1.000251		
836.0	836.0	14.2	50.4	89.7	91.0	194.8	15.1	1000251	1.000251		
837.0	837.0	14.2	50.4	89.4	91.0	194.8	15.1	1000251	1.000251		
838.0	838.0	14.2	50.4	89.1	91.0	194.8	15.1	1000251	1.000251		
839.0	839.0	14.2	50.4	88.8	91.0	194.8	15.1	1000251	1.000251		
840.0	840.0	14.2	50.4	88.5	91.0	194.8	15.1	1000251	1.000251		
841.0	841.0	14.2	50.4	88.2	91.0	194.8	15.1	1000251	1.000251		
842.0	842.0	14.2	50.4	87.9	91.0	194.8	15.1	1000251	1.000251		
843.0	843.0	14.2	50.4	87.6	91.0	194.8	15.1	1000251	1.000251		
844.0	844.0	14.2	50.4	87.3	91.0	194.8	15.1	1000251	1.000251		
845.0	845.0	14.2	50.4	87.0	91.0	194.8	15.1	1000251	1.000251		
846.0	846.0	14.2	50.4	86.7	91.0	194.8	15.1	1000251	1.000251		
847.0	847.0	14.2	50.4	86.4	91.0	194.8	15.1	1000251	1.000251		
848.0	848.0	14.2	50.4	86.1	91.0	194.8	15.1	1000251	1.000251		
849.0	849.0	14.2	50.4	85.8	91.0	194.8	15.1	1000251	1.000251		
850.0	850.0	14.2	50.4	85.5	91.0	194.8	15.1	1000251	1.000251		
851.0	851.0	14.2	50.4	85.2	91.0	194.8	15.1	1000251	1.000251		
852.0	852.0	14.2	50.4	84.9	91.0	194.8	15.1	1000251	1.000251		
853.0	853.0	14.2	50.4	84.6	91.0	194.8	15.1	1000251	1.000251		
854.0	854.0	14.2	50.4	84.3	91.0	194.8	15.1	1000251	1.000251		
855.0	855.0	14.2	50.4	84.0	91.0	194.8	15.1	1000251	1.000251		
856.0	856.0	14.2	50.4	83.7	91.0	194.8	15.1	1000251	1.000251		
857.0	857.0	14.2	50.4	83.4	91.0	194.8	15.1	1000251	1.000251		
858.0	858.0	14.2	50.4	83.1	91.0	194.8	15.1	1000251	1.000251		
859.0	859.0	14.2	50.4	82.8	91.0	194.8	15.1	1000251	1.000251		
860.0	860.0	14.2	50.4	82.5	91.0	194.8	15.1	1000251	1.000251		
861.0	861.0	14.2	50.4	82.2	91.0	194.8	15.1	1000251	1.000251		
862.0	862.0	14.2	50.4	81.9	91.0	194.8	15.1	1000251	1.000251		
863.0	863.0	14.2	50.4	81.6	91.0	194.8	15.1	1000251	1.000251		
864.0	864.0	14.2	50.4	81.3	91.0	194.8	15.1	1000251	1.000251		
865.0	865.0	14.2	50.4	81.0	91.0	194.8	15.1	1000251	1.000251		
866.0	866.0	14.2	50.4	80.7	91.0	194.8	15.1	1000251	1.000251		
867.0	867.0	14.2	50.4	80.4	91.0	194.8	15.1	1000251	1.000251		
868.0	868.0	14.2	50.4	80.1	91.0	194.8	15.1	1000251	1.000251		
869.0	869.0	14.2	50.4	79.8	91.0	194.8	15.1	1000251	1.000251		
870.0	870.0	14.2	50.4	79.5	91.0	194.8	15.1	1000251	1.000251		
871.0	871.0	14.2	50.4	79.2	91.0	194.8	15.1	1000251	1.000251		
872.0	872.0	14.2	50.4	78.9	91.0	194.8	15.1	1000251	1.000251		
873.0	873.0	14.2	50.4	78.6	91.0	194.8	15.1	1000251	1.000251		
874.0	874.0	14.2	50.4	78.3	91.0	194.8	15.1	1000251	1.000251		
875.0	875.0	14.2	50.4	78.0	91.0	194.8	15.1	1000251	1.000251		
876.0	876.0	14.2	50.4	77.7	91.0	194.8	15.1	1000251	1.000251		
877.0	877.0	14.2	50.4	77.4	91.0	194.8	15.1	1000251	1.000251		
878.0	878.0	14.2	50.4	77.1	91.0	194.8	15.1	1000251	1.000251		
879.0	879.0	14.2	50.4	76.8	91.0	194.8	15.1	1000251	1.000251		
880.0	880.0	14.2	50.4	76.5	91.0	194.8	15.1	1000251	1.000251		
881.0	881.0	14.2	50.4	76.2	91.0	194.8	15.1	1000251	1.000251		
882.0	882.0	14.2	50.4	75.9	91.0	194.8	15.1	1000251	1.000251		
883.0	883.0	14.2	50.4	75.6	91.0	194.8	15.1	1000251	1.000251		
884.0	884.0	14.2	50.4	75.3	91.0	194.8	15.1	1000251	1.000251		
885.0	885.0	14.2	50.4	75.0	91.0	194.8	15.1	1000251	1.000251		
886.0	886.0	14.2	50.4	74.7	91.0	194.8	15.1	1000251	1.000251		
887.0	887.0	14.2	50.4	74.4	91.0	194.8	15.1	1000251	1.000251		
888.0	888.0	14.2	50.4	74.1	91.0	194.8	15.1	1000251	1.000251		
889.0	889.0	14.2	50.4	73.8	91.0	194.8	15.1	1000251	1.000251		
890.0	890.0	14.2	50.4	73.5	91.0	194.8	15.1	1000251	1.000251		
891.0	891.0	14.2	50.4	73.2	91.0	194.8	15.1	1000251	1.000251		
892.0	892.0	14.2	50.4	72.9	91.0	194.8	15.1	1000251	1.000251		
893.0	893.0	14.2	50.4	72.6	91.0	194.8	15.1	1000251	1.000251		
894.0	894.0	14.2	50.4	72.3	91.0	194.8	15.1	1000251	1.000251		
895.0	895.0	14.2	50.4	72.0	91.0	194.8	15.1	1000251	1.000251		
896.0	896.0	14.2	50.4	71.7	91.0	1					

GEODETIC COORDINATES  
37.40667 147.066  
196.77033 100.066

TABLE 6 Cont'd

GEOMETRIC DISTANCE	PRESSURE MILLIBARS	TEMPERATURE DEGREES C	WIND DIRECTION DEGREES C	WIND SPEED KNOTS	INDEX OF REFRACTION
GEOMETRIC DISTANCE	PRESSURE MILLIBARS	TEMPERATURE DEGREES C	WIND DIRECTION DEGREES C	WIND SPEED KNOTS	INDEX OF REFRACTION
23500.0	1012.5	-75.2	270.2	292.6	1.000122
23500.0	1014.8	-74.5	270.5	292.0	1.000129
24500.0	1019.5	-76.6	275.6	226.6	1.000127
24500.0	1019.5	-75.7	276.1	225.2	1.000125
25500.0	1017.4	-76.8	276.0	223.0	1.000125

10

STATIO. 171111Z NOV 64  
REF. 21  
LAT 32°46'N LAT 104°37'W  
ELEV. 1000 MDT

WEATHER LEVELS  
104000Z NOV 64  
WHITE CLOUDS

GEODETIC COORDINATES  
32°46'N LAT DEG  
104°37'W LON NEG

TABLE 7

WELLINGTHS	PERF	PROCEDURE GEORECTENTIAL		TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	WIND DATA DIRECTION DEGREES(TN) KNOTS
		DEGREES CENTIGRADE	DEGREES CENTIGRADE			
050.0	500.0	21.0	12.0	59.	152.0	5.0
060.0	674.0	17.0	10.0	61.	170.0	12.3
070.0	865.0	15.0	10.0	53.	214.0	12.2
080.0	1046.0	11.0	7.0	57.	262.0	10.3
090.0	1245.0	6.0	7.0	77.	04.0	8.1
100.0	1427.0	2.0	0.0	81.	170.0	11.6
110.0	1601.0	-2.0	-2.0	86.	50.0	12.4
120.0	1670.0	-7.0	-6.0	84.	150.0	5.1
130.0	1736.0	-11.0	-10.0	50.	180.0	10.0
140.0	1792.0	-14.0	-13.0	41.		

STATION: 454545 NO. 1000 NDT  
2 JULY 1972

STATION LEVEL DATA  
SUN 1000 NDT  
TABLE 8

GEODETIC COORDINATES  
72° 48' 36" LAT DEG  
106° 42' 07" LON DEG

PRESSURE, BAROMETRIC	TEMPERATURE, AIR, °C	TEMPERATURE, DRYBULB, °C	TEMPERATURE, WETBULB, °C	AIR DENSITY, GRAMS/CENTIGRADE	REL. HUM. PERCENT
981.7	26.2	25.0	25.0	1.200	50.0
979.6	24.2	23.0	23.0	1.205	57.0
976.4	21.5	20.3	20.3	1.209	62.0
973.2	19.1	18.0	18.0	1.214	66.0
970.0	17.2	16.0	16.0	1.218	71.0
966.8	15.2	14.0	14.0	1.222	75.0
963.6	13.1	12.0	12.0	1.226	79.0
960.4	11.5	10.4	10.4	1.230	83.0
957.2	9.5	8.4	8.4	1.234	86.0
953.9	7.5	6.4	6.4	1.238	89.0
950.7	5.5	4.4	4.4	1.242	91.0
947.5	3.5	2.4	2.4	1.246	93.0
944.3	1.5	0.4	0.4	1.250	95.0
941.1	-1.5	-0.5	-0.5	1.254	98.0
937.9	-4.1	-3.1	-3.1	1.258	94.0
934.7	-6.1	-5.1	-5.1	1.262	97.0
931.5	-8.1	-7.1	-7.1	1.265	99.0
928.3	-11.8	-10.8	-10.8	1.269	95.0
925.1	-14.8	-13.8	-13.8	1.273	91.0
921.9	-21.5	-20.5	-20.5	1.275	82.0
918.7	-21.7	-20.7	-20.7	1.275	73.0
915.5	-20.5	-19.5	-19.5	1.275	64.0
912.3	-17.5	-16.5	-16.5	1.275	55.0
909.1	-9.3	-8.3	-8.3	1.275	46.0

STATION 06, LATITUDE 32°48'36" LONGITUDE 106°22'07" MDT

UNATED AIR DATA  
516200125  
TABLE 9

ALTIMETER	PRESSURE	TEMPERATURE	REL.HUM.	SENSITV.	PERCENT	CUBIC	SOUND	SPD OF	WIND DATA	INDEX
MSL PRESS	MM Hg	DEG C	MM Hg	MM Hg	MM Hg	MM Hg	MM Hg	METERS	KNOTS	OF
								MM Hg	MM Hg	REFRACTION
1000.0	999.7	26.2	95.0	1019.4	476.5	1460.0	1460.0	6.1	1.000299	
999.6	999.2	26.0	95.0	1018.5	476.5	1461.4	1461.4	6.1	1.000299	
999.5	998.6	25.8	94.9	1019.4	473.4	1545.4	1545.4	6.2	1.000293	
999.4	998.1	25.7	94.7	1019.4	473.4	1545.4	1545.4	6.2	1.000293	
999.3	997.6	25.7	94.7	1009.4	471.2	1645.4	1645.4	6.5	1.000298	
999.2	997.1	25.6	94.5	1017.7	469.7	1745.4	1745.4	6.5	1.000295	
999.1	996.6	25.5	94.3	1020.8	465.7	1845.4	1845.4	6.6	1.000295	
999.0	996.2	25.4	94.1	1017.0	465.6	1945.4	1945.4	6.6	1.000282	
998.9	995.7	25.3	94.0	1014.1	465.6	1957.4	1957.4	6.6	1.000275	
998.8	995.2	25.2	93.9	1014.1	465.7	1967.4	1967.4	6.6	1.000275	
998.7	994.6	25.1	93.7	1015.5	466.5	1970.0	1970.0	6.8	1.000268	
998.6	994.1	25.0	93.5	1015.5	466.5	1970.0	1970.0	6.8	1.000268	
998.5	993.6	24.9	93.4	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
998.4	993.1	24.8	93.3	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
998.3	992.6	24.7	93.2	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
998.2	992.1	24.6	93.1	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
998.1	991.6	24.5	93.0	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
998.0	991.1	24.4	92.9	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
997.9	990.6	24.3	92.8	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
997.8	990.1	24.2	92.7	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
997.7	989.6	24.1	92.6	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
997.6	989.1	24.0	92.5	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
997.5	988.6	23.9	92.4	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
997.4	988.1	23.8	92.3	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
997.3	987.6	23.7	92.2	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
997.2	987.1	23.6	92.1	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
997.1	986.6	23.5	92.0	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
997.0	986.1	23.4	91.9	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
996.9	985.6	23.3	91.8	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
996.8	985.1	23.2	91.7	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
996.7	984.6	23.1	91.6	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
996.6	984.1	23.0	91.5	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
996.5	983.6	22.9	91.4	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
996.4	983.1	22.8	91.3	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
996.3	982.6	22.7	91.2	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
996.2	982.1	22.6	91.1	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
996.1	981.6	22.5	91.0	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
996.0	981.1	22.4	90.9	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
995.9	980.6	22.3	90.8	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
995.8	980.1	22.2	90.7	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
995.7	979.6	22.1	90.6	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
995.6	979.1	22.0	90.5	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
995.5	978.6	21.9	90.4	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
995.4	978.1	21.8	90.3	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
995.3	977.6	21.7	90.2	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
995.2	977.1	21.6	90.1	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
995.1	976.6	21.5	90.0	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
995.0	976.1	21.4	89.9	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
994.9	975.6	21.3	89.8	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
994.8	975.1	21.2	89.7	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
994.7	974.6	21.1	89.6	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
994.6	974.1	21.0	89.5	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
994.5	973.6	20.9	89.4	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
994.4	973.1	20.8	89.3	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
994.3	972.6	20.7	89.2	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
994.2	972.1	20.6	89.1	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
994.1	971.6	20.5	89.0	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
994.0	971.1	20.4	88.9	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
993.9	970.6	20.3	88.8	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
993.8	970.1	20.2	88.7	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
993.7	969.6	20.1	88.6	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
993.6	969.1	20.0	88.5	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
993.5	968.6	19.9	88.4	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
993.4	968.1	19.8	88.3	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
993.3	967.6	19.7	88.2	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
993.2	967.1	19.6	88.1	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
993.1	966.6	19.5	88.0	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
993.0	966.1	19.4	87.9	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
992.9	965.6	19.3	87.8	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
992.8	965.1	19.2	87.7	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
992.7	964.6	19.1	87.6	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
992.6	964.1	19.0	87.5	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
992.5	963.6	18.9	87.4	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
992.4	963.1	18.8	87.3	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
992.3	962.6	18.7	87.2	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
992.2	962.1	18.6	87.1	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
992.1	961.6	18.5	87.0	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
992.0	961.1	18.4	86.9	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
991.9	960.6	18.3	86.8	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
991.8	960.1	18.2	86.7	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
991.7	959.6	18.1	86.6	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
991.6	959.1	18.0	86.5	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
991.5	958.6	17.9	86.4	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
991.4	958.1	17.8	86.3	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
991.3	957.6	17.7	86.2	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
991.2	957.1	17.6	86.1	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
991.1	956.6	17.5	86.0	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
991.0	956.1	17.4	85.9	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
990.9	955.6	17.3	85.8	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
990.8	955.1	17.2	85.7	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
990.7	954.6	17.1	85.6	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
990.6	954.1	17.0	85.5	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
990.5	953.6	16.9	85.4	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
990.4	953.1	16.8	85.3	1015.5	466.7	1970.0	1970.0	6.8	1.000268	
990.3	952.6	16.7	85.2	1015.5	466.7	1970.0	1970.0	6.8	1.00026	

STATION: 111141 60°.70' E. 55°  
ELEVATION: 54' 1000' MDT  
REF ID: 50. NO. 174

UPPER AIR DATA  
1970-01-22

GEODETIC COORDINATES  
32°48'34" LAT. DEG  
106°42'30" LON. DEG

TABLE 9, Cont'd

PRESSURE SL	TEMPERATURE SL	REL.HUM. SL	SPEED OF WIND DATA	INDEX OF REFRACTION
PRESSURE SL	TEMPERATURE SL	REL.HUM. SL	DIRECTION DEGREES(TN)	SPEED KNOTS
1010.0	-14.2	.764	571.0	1.000121
1010.0	-15.0	.759	567.7	1.000120
1010.0	-15.3	.770	575.8	
1010.5	-16.4	.774	557.0	1.000127
1010.5	-16.4	.760	524.5	
1010.6	-17.0	.783	545.0	1.000125
			523.1	

STATION NO. LATITUDE 40°07' N FREE AIR  
ELEVATION NO. 17c 1000 MDT

## MANDATORY LEVELS

GEODETIC COORDINATES  
32°48'03" LAT DEG  
106°42'10" LONG DEG

TABLE 10

PRESSURE GEOPOTENTIAL		TEMPERATURE REL. HUM.		WIND DATA	
MILLIBARS	FEET	DEGREES CENTIGRAD	PFRCFNT	DIRECTION DEGREES (TN)	SPEED
980.0	5000.0	27.0	12.0	58.	167.2
990.0	6762.0	18.9	11.0	63.	181.9
995.0	8760.0	16.0	6.8	51.	216.9
1000.0	10000.0	11.0	2.5	58.	257.1
1005.0	11280.0	6.0	1.4	69.	294.5
1010.0	12560.0	1.0	-1.4	80.	7.4
1015.0	13840.0	-4.0	-5.2	87.	4.0
1020.0	15120.0	-9.0	-9.5	97.	40.3
1025.0	16400.0	-14.0	-10.5	53.	125.5
1030.0	17680.0	-19.0	-26.0	1.	13.2
1035.0	18960.0	-24.0	-38.0		2.4
1040.0	20240.0	-29.0	-58.		0.7

STATION ALTITUDE 4001.40 FEET MSI  
 2 JULY 1964 1000 MDT  
 ASPRENTHON NC. 12

SIGNIFICANT LEVEL DATA

19402000112  
 NON  
 GEODETIC COORDINATES  
 32°57'20" LAT DEG  
 106°29'43" LON DEG

TABLE 11

PRESSURE GEOMETRIC MILLIBARS MSL FEET	TEMPERATURE ATR DEGREES CENTIGRADE	DWP POINT DEGREES CENTIGRADE	REL.HUM. PERCENT
6000.0	40n3.7	25.7	54.0
6770.7	4247.4	23.9	54.0
6550.0	50n1.8	21.0	52.2
6140.4	4203.8	16.7	39.4
7820.0	7278.3	17.1	9.8
7560.4	9170.4	17.5	7.3
7000.0	10478.6	11.3	6.1
6760.7	11241.2	9.3	4.3
6560.6	14690.7	-2.7	-3.2
5000.0	10349.4	-8.6	-8.8
4770.2	20910.9	-11.7	-14.4
4550.5	21721.8	-11.2	-20.7
4410.9	22521.6	-12.4	-21.6
4340.0	22929.0	-13.0	-25.2
4240.0	24449.8	-13.8	-22.9
4100.7	23777.2	-14.8	-27.8
4000.0	24947.8	-17.8	-27.8

STATION ALTITUDE 4000', REF MSL  
ASCESSION NO. 92 1000 MDT

UPPER AIR DATA  
1960200012  
NOV

TABLE 12

GEOMETRIC COORDINATES 32°57'20" LAT DEG 106°29'43" LON DEG	ATMOSPHERIC PRESSURE ALTIMETER MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
4000.0	980.0	25.7	15.7	64.0	1019.0	676.0	180.0	16.0	1.000303
4500.0	955.0	22.0	12.7	65.0	1017.0	672.6	176.7	14.3	1.000292
5000.0	920.1	21.0	12.2	57.0	1000.1	670.3	173.4	16.7	1.000285
5500.0	875.4	19.2	11.0	59.1	980.2	668.1	170.6	15.1	1.000279
6000.0	820.5	17.4	9.9	41.2	978.1	666.0	167.5	15.5	1.000273
6500.0	865.0	16.8	9.5	62.0	964.5	665.2	172.6	16.4	1.000268
7000.0	201.6	17.0	9.7	62.0	945.2	665.5	170.6	17.3	1.000265
7500.0	777.8	17.2	9.2	59.3	928.0	665.7	191.0	11.7	1.000259
8000.0	744.1	17.4	7.8	62.1	911.7	665.8	209.3	10.1	1.000251
8500.0	707.0	16.6	6.8	52.5	897.9	666.8	227.6	9.5	1.000245
9000.0	277.2	15.2	6.2	54.7	884.0	663.2	359.7	9.0	1.000241
9500.0	726.0	13.9	5.5	56.9	874.7	661.6	252.8	8.9	1.000236
10000.0	711.1	12.5	4.7	59.1	867.7	659.9	259.8	8.9	1.000232
10500.0	698.4	11.2	4.1	41.7	852.7	658.3	266.5	9.1	1.000228
11000.0	685.8	9.9	4.3	67.8	847.0	657.0	273.4	9.1	1.000226
11500.0	672.3	8.8	4.0	72.1	828.1	655.6	282.7	9.0	1.000223
12000.0	660.8	7.7	3.4	74.4	814.1	654.3	290.8	8.9	1.000219
12500.0	648.5	6.6	2.8	76.7	804.2	653.0	306.7	8.7	1.000215
13000.0	636.5	5.4	2.1	79.0	792.5	651.6	321.4	9.1	1.000211
13500.0	624.7	4.3	1.4	81.3	781.0	650.3	336.1	9.6	1.000207
14000.0	612.1	3.2	0.7	83.6	769.7	649.0	351.2	10.5	1.000204
14500.0	600.8	2.1	0.1	85.0	758.6	647.6	1.7	11.5	1.000200
15000.0	590.5	1.0	-0.7	88.2	747.6	646.3	12.5	11.8	1.000196
15500.0	579.7	-1.1	-1.4	20.4	734.8	644.9	22.5	12.5	1.000192
16000.0	568.0	-1.2	-2.2	22.9	724.7	643.7	30.0	12.7	1.000188
16500.0	558.4	-2.3	-2.0	75.2	715.8	642.6	36.4	12.5	1.000185
17000.0	547.8	-3.4	-3.0	66.1	705.1	640.9	47.0	12.4	1.000181
17500.0	537.7	-4.4	-4.9	66.3	694.5	639.6	44.7	11.9	1.000177
18000.0	527.0	-5.5	-6.0	66.5	684.0	638.2	45.4	11.4	1.000173
18500.0	516.0	-6.6	-7.0	66.7	674.7	636.9	45.1	10.8	1.000169
19000.0	505.0	-7.6	-7.0	66.9	662.4	635.6	42.5	11.0	1.000166
19500.0	494.2	-8.7	-8.3	65.5	652.7	634.3	39.4	9.2	1.000162
20000.0	483.4	-9.8	-9.1	60.1	647.5	632.9	31.5	7.2	1.000158
20500.0	472.6	-10.8	-10.1	60.3	641.6	631.4	20.4	5.0	1.000154
21000.0	461.8	-11.8	-10.6	64.6	632.7	621.6	12.7	3.7	1.000150
21500.0	451.0	-12.8	-11.3	76.5	622.4	610.5	7.0	1.7	1.000144
22000.0	440.2	-13.8	-10.6	54.7	611.7	610.7	7.0	1.0	1.000140
22500.0	429.5	-14.8	-10.0	65.3	592.5	610.3	7.5	2.5	1.000137
23000.0	418.7	-15.8	-11.6	46.0	580.6	629.4	870.0	628.5	1.000134
23500.0	408.0	-15.1	-12.9	70.5	570.0	626.6	660.0	627.5	1.000132
24000.0	397.4	-12.3	-11.9	64.6	560.0	623.3	64.0	61.0	

STATION ALTITUDE 4000.00 FREE "SL  
2 JULY 94 1000 NDT  
SCREENING NO. 42

UPPER AIR DATA  
1740220012  
NOV

GEODETIC COORDINATES  
32°57'00" LAT DEG  
406.29439 LON DEG

TABLE 12 Cont'd

REFRACTIVE INDEX	PRESSURE	TEMPERATURE	RFL.HM.	DENSITY	SPEED OF	WIND DATA	INDEX
ATMOS	MM Hg	DEGREES	MM	CM/CUBIC	OUND	DIRECTION	OF
SL FCT	MLBARS	DEGREES	METER	METER	KNOTS	SPEED	REFRACTION
74600.0	415.0	-45.6	27.7	23.7	561.8	625.7	1.000129
74500.0	417.0	-46.6	27.7	27.5	557.7	624.1	1.000127

STATION ALTITUDE 4000.00 FEET ASL  
2 JULY 94 1000 MDT  
ELEVATION 40. 1?

MANDATORY LEVELS  
140200Z, 1,  
NON

GEODETIC COORDINATES  
32.57200 LAT DEG  
106.29630 LON DEG

TABLE 13

PRESSURE MILLIBARS	GRADIENTAL DEPTH	TEMPERATURE		REL.HUM. PERCENT	WIND DATA	
		AIR DEGREES	NEWPOINT CFT/IGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4000.	21.0	12.2	57.	171.4	16.7
870.0	6706.	14.0	0.4	62.	175.8	15.9
850.0	8514.	14.5	4.8	53.	228.1	9.5
700.0	10420.	11.7	6.1	61.	265.7	9.0
650.0	12444.	10.7	7.8	76.	204.8	8.7
600.0	14580.	2.0	-1	86.	1.0	11.6
550.0	16974.	-7.2	-7.7	96.	41.5	12.4
500.0	19332.	-9.4	-8.9	97.	40.4	9.6
450.0	21295.	-11.7	-21.1	65.	275.0	3.8
400.0	24926.	-17.8	-27.9	41.		

STATION ALTITUDE 1000.0 FT WEST  
2 JULY 04  
STATION NO. 300

SIGNIFICANT LEVEL DATA

194000Z 50  
WHITE CLOUDS

GEODETIC COORDINATES  
32.4004° LAT DEG  
106.7703° LONG DEG

TABLE 14

PRESSURE (INCHES) MILLIBARS	GEOMETRIC ALTITUDE FEET	TEMPERATURE AIR DEWPONT DEGREES CENTIGRADE	REL. HUM. PERCENT
98.0	1000.0	78.2	63.0
97.2	4447.0	75.8	65.0
95.6	5720.7	74.4	68.0
91.4	4257.6	70.8	56.0
79.6	6077.6	77.4	10.5
77.8	7441.6	79.1	53.0
73.0	9342.1	74.4	52.0
70.5	11495.1	71.6	59.0
67.0	11470.2	70.8	64.0
65.6	12245.9	70.5	62.0
55.6	14601.2	-1.7	0.0
52.4	14009.7	-6.9	95.0
49.4	10494.9	-6.6	75.0
40.6	10715.9	-6.9	71.0
30.5	10473.3	-7.6	68.0
28.4	20179.6	-0.1	67.0
27.4	20622.1	-10.2	70.0
46.6	21001.1	-10.2	68.0
14.7	22266.6	-9.4	75.0
40.0	24011.0	-19.2	32.0

STATION ALTITUDE 1080.0 FT FRET MSL  
2 JULY 64  
ASCENDANCE NO. 750  
1130 MDT

UPPER AIR DATA  
1940Z 2750  
WHITE SANDS  
MSL AMSL

GEOFETIC COORDINATES  
32°40.0' LAT DEG  
106.27°33' LON DEG

TABLE 15

GEOMETRIC PRESSURE ATMOS.	TEMPERATURE ATMOS. mSL FFC	REL.HUM. DROPOUT PERCENT	DENSITY CENTIGRANE METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	INDEX OF REFRACTION
990.0	78.0	14.4	43.0	678.7	180.0	1.000294
870.0	78.1	14.4	42.0	678.6	180.0	1.000294
850.0	75.7	12.9	45.1	675.7	7.0	1.000287
830.0	74.5	12.7	47.3	674.5	7.6	1.000283
810.0	72.6	12.0	51.1	672.1	7.4	1.000279
800.0	70.6	11.2	54.3	669.9	7.2	1.000274
780.0	68.9	10.7	58.0	667.8	7.0	1.000271
760.0	67.5	10.3	61.0	666.1	6.8	1.000267
740.0	65.0	9.9	65.2	666.5	6.7	1.000267
720.0	63.0	9.6	69.7	666.5	7.1	1.000258
700.0	61.3	7.6	73.0	665.7	7.2	1.000251
680.0	59.8	16.2	66.6	664.3	7.5	1.000245
660.0	59.5	15.1	65.5	663.0	7.5	1.000245
640.0	57.5	14.0	64.0	661.6	7.8	1.000239
620.0	54.8	12.8	63.5	660.2	7.2	1.000235
600.0	52.6	11.6	63.8	658.8	9.5	1.000228
580.0	50.0	10.0	61.8	657.0	9.7	1.000223
560.0	47.6	8.8	62.3	655.4	10.1	1.000219
540.0	45.2	8.6	61.9	655.7	9.9	1.000215
520.0	42.8	7.9	63.7	652.4	10.0	1.000211
500.0	40.6	7.7	61.0	651.0	9.8	1.000208
480.0	38.0	5.5	66.6	645.6	9.8	1.000205
460.0	36.2	4.5	67.0	645.0	9.4	1.000202
440.0	34.6	4.3	74.0	650.1	10.8	1.000198
420.0	32.2	3.1	77.4	648.7	12.4	1.000195
400.0	30.0	1.9	77.5	648.2	10.5	1.000195
380.0	28.0	1.0	67.2	647.0	30.4	1.000191
360.0	26.2	0.6	77.6	645.4	40.7	1.000187
340.0	24.6	0.4	74.0	644.6	45.7	1.000183
320.0	23.2	0.1	77.0	642.0	47.1	1.000185
300.0	21.7	-1.7	77.5	641.7	49.5	1.000181
280.0	20.0	-1.1	60.8	641.7	49.5	1.000177
260.0	18.1	-1.7	64.2	634.4	54.8	1.000174
240.0	16.3	-2.2	67.6	644.6	66.7	1.000166
220.0	14.7	-1.0	61.0	642.0	63.7	1.000162
200.0	13.2	-1.7	61.0	642.0	63.7	1.000162
180.0	11.7	-2.2	67.9	641.7	78.0	1.000158
160.0	10.3	-1.6	64.4	640.4	56.0	1.000155
140.0	8.8	-1.4	64.8	639.2	34.4	1.000152
120.0	7.2	-0.8	60.0	639.2	2.7	1.000142
100.0	5.5	-0.3	75.0	636.7	4.0	1.000149
80.0	4.0	-1.7	71.7	636.7	4.7	1.000144
60.0	2.2	-2.2	67.9	641.0	24.3	1.000139
40.0	0.6	-1.0	60.6	632.2	6.7	1.000136
20.0	-1.4	-1.7	69.0	631.0	4.0	1.000134
0.0	-1.4	-2.1	70.0	630.0	4.0	1.000134
20.0	-1.0	-1.4	74.7	629.0	23.0	1.000134
40.0	-0.3	-1.4	74.7	629.0	6.7	1.000134
60.0	-0.1	-1.4	74.2	629.0	6.9	1.000134

STATION 100 LATITUDE 25°00'00" FEE = 0.51  
ELEVATION 500 NO. 220 1130 NDT

GEODESIC COORDINATES  
25°00'00" LAT DEG  
106°17'03" LONG DEG

#### UPPER AIR DATA

WEATHER STANDARDS

TABLE 15 Cont'd

GRADIENT	GRADIENT	REFRACTIVE INDEX	REFLECTIVE INDEX	DENSITY	SPEED OF SOUND	DIRECTION	WIND DATA	INDEX	
ALTIMETER	MILLIBARS	DECREE	REFRACTIVE INDEX	PERCENT	CM/CUBIC METER	KNOTS	DEGREES(TN)	KNOTS	REFRACTION
MSL FEET	MILLIBARS	DECREE	REFRACTIVE INDEX	PERCENT	METER	KNOTS	DEGREES(TN)	KNOTS	REFRACTION
2325.0	1012.0	-64.0	-26.6	73.7	571.7	627.3	1.000111		
2325.0	1012.0	-65.0	-27.1	73.7	570.7	626.7	1.000120		
2325.0	1012.0	-65.0	-27.1	73.7	570.7	626.7	1.000127		
2325.0	1012.0	-66.2	-28.8	72.6	552.0	624.7	1.000127		
2325.0	1012.0	-67.2	-29.0	72.0	562.7	623.7	1.000124		

STATION: ALTAIRUE 19600, 10000' MSL  
 2 JULY 76  
 REPORT NO. 1130 MDT

MANDATORY LEVELS  
 10400-055  
 WHITE SNOOK  
 10600 MDT

TABLE 16

GEODETIC COORDINATES  
 32.6061 LAT DEG  
 106.7733 LON DEG

PRESSURE MILLIBARS	GRADIENT FEET	TEMPERATURE DEGREES CENTIGRADE	REL.HUM. PERCENT	WIND DATA		
				DIRECTION DEGREES(TN)	SPEED KNOTS	
960.	5024.	26.4	12.7	48.	7.6	
950.	6751.	10.1	10.4	62.	184.6	6.8
950.	9562.	1.1	6.5	53.	242.8	7.6
950.	10675.	1.4	2.0	59.	281.1	9.2
950.	12296.	7.0	1.5	66.	323.2	10.0
950.	14546.	7.7	-4	78.	18.1	9.4
950.	16936.	-7.6	-7.7	92.	60.1	8.5
950.	19196.	-7.4	-1.7	68.	81.8	2.6
950.	22066.	-1.0	-22.7	38.	241.4	6.5
2000.	24090.	-17.7	-10.0	32.		

STATION ALTITUDE 1907.0 FT. MSL  
7 JULY 94 1130 MDT

SCREENING NO. 176

SIGNIFICANT LEVEL DATA

1800A012A

< < <

TABLE 17

GEODETIC COORDINATES  
32°48'34" LAT DEG  
106°42'30" LONG DEG

PRESURE GEMETRER  
MILLIBARS \*SL FEET

TEMPERATURE  
ALTITUDE  
DEGREES CFNTIGRADE

		TEMPERATURE	AIR DFWPOINT	REL.HUM.
		DEGREES	CFNTIGRADE	PERCENT
881.0	1907.3	29.1	15.2	63.0
871.0	4252.0	25.9	12.7	66.0
851.0	4040.0	22.8	11.5	49.0
781.0	2022.2	16.7	9.6	67.0
751.0	9350.0	16.3	7.8	57.0
701.0	10490.0	12.0	4.5	60.0
671.0	11649.5	9.2	2.1	61.0
591.0	14775.8	2.2	-1.8	75.0
471.0	15680.0	-3	-1.6	49.0
401.0	10429.6	-6.9	-7.2	98.0
477.0	20636.7	-8.6	-9.0	97.0
671.0	27091.7	-10.7	-12.2	80.0
665.0	21266.3	-11.7	-10.3	53.0
449.0	22111.3	-12.7	-20.9	50.0
441.0	27562.9	-13.9	-76.3	34.0
617.0	24845.0	-17.1	-73.2	23.0
401.0	24076.8	-18.5	-20.7	33.0

STATION ALTITUDE 3997.0 FT. FREE "SL  
2 JULY 04  
ASCENSION NO. 126 MDT

UPPER AIR DATA  
184006Z0126  
S \* R  
TABLE 18

GEODETIC COORDINATES  
32°48'03" LAT DEG  
106°42'07" LON DEG

CHAMBER	PRESSURE INCHES MM	TEMPERATURE DEGREES CENTIGRADE	WIND DIRECTION DEGREES (TN)	SPEED OF WIND DATA KNOTS	INDEX OF REFRACTION
CHAMBER	PRESSURE INCHES MM	TEMPERATURE DEGREES CENTIGRADE	WIND DIRECTION DEGREES (TN)	SPEED OF WIND DATA KNOTS	INDEX OF REFRACTION
1007.0	881.7	19.1	15.2	43.0	1.00207
4000.0	881.2	20.1	15.2	47.0	1.00207
4500.0	845.1	24.8	12.3	45.8	1.00206
5000.0	851.2	23.0	11.6	48.8	1.00206
5500.0	825.3	21.6	11.2	41.9	1.00206
6000.0	811.7	20.2	10.9	55.0	1.00206
6500.0	807.4	18.8	10.4	58.1	1.00206
7000.0	793.2	17.5	9.9	61.2	1.00206
7500.0	767.3	16.0	9.3	61.8	1.00206
8000.0	725.5	16.4	2.4	59.0	1.00206
8500.0	751.0	16.0	7.5	57.2	1.00206
9000.0	779.5	15.0	6.8	57.9	1.00206
9500.0	775.4	14.0	6.0	58.6	1.00206
10000.0	712.4	12.0	5.2	59.3	1.00206
10500.0	460.7	12.0	4.5	60.0	1.00206
11000.0	497.1	10.8	7.4	60.4	1.00206
11500.0	474.7	9.6	2.4	60.9	1.00206
12000.0	642.3	8.4	1.7	62.6	1.00206
12500.0	450.2	7.3	1.1	64.0	1.00206
13000.0	629.2	6.1	5.5	67.1	1.00206
13500.0	626.5	5.0	1.1	69.4	1.00206
14000.0	614.0	3.9	1.8	71.7	1.00206
14500.0	643.6	2.7	1.5	74.0	1.00206
15000.0	502.4	1.5	1.1	79.0	1.00206
15500.0	526.4	1.2	1.7	66.5	1.00206
16000.0	520.7	0.5	1.8	62.2	1.00206
16500.0	520.5	0.0	1.0	61.0	1.00206
17000.0	519.0	-2.0	3.6	52.2	1.00206
17500.0	518.2	-2.6	3.6	51.6	1.00206
18000.0	518.2	-4.3	1.5	51.1	1.00206
18500.0	518.2	-5.2	1.5	50.8	1.00206
19000.0	519.2	-4.1	1.6	50.0	1.00206
19500.0	408.6	-7.0	1.4	51.4	1.00206
20000.0	409.7	-7.7	1.4	51.4	1.00206
20500.0	520.7	-8.0	1.4	51.4	1.00206
21000.0	520.7	-8.4	1.4	51.4	1.00206
21500.0	520.7	-10.9	1.4	51.4	1.00206
22000.0	520.7	-12.0	1.0	51.4	1.00206
22500.0	520.7	-12.6	0.7	51.4	1.00206
23000.0	520.7	-13.7	0.0	51.4	1.00206
23500.0	520.7	-15.0	-0.3	51.4	1.00206
24000.0	520.7	-15.5	-0.3	51.4	1.00206
24500.0	520.7	-15.0	-0.3	51.4	1.00206
25000.0	520.7	-15.0	-0.3	51.4	1.00206
25500.0	520.7	-15.0	-0.3	51.4	1.00206
26000.0	520.7	-15.0	-0.3	51.4	1.00206
26500.0	520.7	-15.0	-0.3	51.4	1.00206
27000.0	520.7	-15.0	-0.3	51.4	1.00206
27500.0	520.7	-15.0	-0.3	51.4	1.00206
28000.0	520.7	-15.0	-0.3	51.4	1.00206
28500.0	520.7	-15.0	-0.3	51.4	1.00206
29000.0	520.7	-15.0	-0.3	51.4	1.00206
29500.0	520.7	-15.0	-0.3	51.4	1.00206
30000.0	520.7	-15.0	-0.3	51.4	1.00206
30500.0	520.7	-15.0	-0.3	51.4	1.00206
31000.0	520.7	-15.0	-0.3	51.4	1.00206
31500.0	520.7	-15.0	-0.3	51.4	1.00206
32000.0	520.7	-15.0	-0.3	51.4	1.00206
32500.0	520.7	-15.0	-0.3	51.4	1.00206
33000.0	520.7	-15.0	-0.3	51.4	1.00206
33500.0	520.7	-15.0	-0.3	51.4	1.00206
34000.0	520.7	-15.0	-0.3	51.4	1.00206
34500.0	520.7	-15.0	-0.3	51.4	1.00206
35000.0	520.7	-15.0	-0.3	51.4	1.00206
35500.0	520.7	-15.0	-0.3	51.4	1.00206
36000.0	520.7	-15.0	-0.3	51.4	1.00206
36500.0	520.7	-15.0	-0.3	51.4	1.00206
37000.0	520.7	-15.0	-0.3	51.4	1.00206
37500.0	520.7	-15.0	-0.3	51.4	1.00206
38000.0	520.7	-15.0	-0.3	51.4	1.00206
38500.0	520.7	-15.0	-0.3	51.4	1.00206
39000.0	520.7	-15.0	-0.3	51.4	1.00206
39500.0	520.7	-15.0	-0.3	51.4	1.00206
40000.0	520.7	-15.0	-0.3	51.4	1.00206
40500.0	520.7	-15.0	-0.3	51.4	1.00206
41000.0	520.7	-15.0	-0.3	51.4	1.00206
41500.0	520.7	-15.0	-0.3	51.4	1.00206
42000.0	520.7	-15.0	-0.3	51.4	1.00206
42500.0	520.7	-15.0	-0.3	51.4	1.00206
43000.0	520.7	-15.0	-0.3	51.4	1.00206
43500.0	520.7	-15.0	-0.3	51.4	1.00206
44000.0	520.7	-15.0	-0.3	51.4	1.00206
44500.0	520.7	-15.0	-0.3	51.4	1.00206
45000.0	520.7	-15.0	-0.3	51.4	1.00206
45500.0	520.7	-15.0	-0.3	51.4	1.00206
46000.0	520.7	-15.0	-0.3	51.4	1.00206
46500.0	520.7	-15.0	-0.3	51.4	1.00206
47000.0	520.7	-15.0	-0.3	51.4	1.00206
47500.0	520.7	-15.0	-0.3	51.4	1.00206
48000.0	520.7	-15.0	-0.3	51.4	1.00206
48500.0	520.7	-15.0	-0.3	51.4	1.00206
49000.0	520.7	-15.0	-0.3	51.4	1.00206
49500.0	520.7	-15.0	-0.3	51.4	1.00206
50000.0	520.7	-15.0	-0.3	51.4	1.00206
50500.0	520.7	-15.0	-0.3	51.4	1.00206
51000.0	520.7	-15.0	-0.3	51.4	1.00206
51500.0	520.7	-15.0	-0.3	51.4	1.00206
52000.0	520.7	-15.0	-0.3	51.4	1.00206
52500.0	520.7	-15.0	-0.3	51.4	1.00206
53000.0	520.7	-15.0	-0.3	51.4	1.00206
53500.0	520.7	-15.0	-0.3	51.4	1.00206
54000.0	520.7	-15.0	-0.3	51.4	1.00206
54500.0	520.7	-15.0	-0.3	51.4	1.00206
55000.0	520.7	-15.0	-0.3	51.4	1.00206
55500.0	520.7	-15.0	-0.3	51.4	1.00206
56000.0	520.7	-15.0	-0.3	51.4	1.00206
56500.0	520.7	-15.0	-0.3	51.4	1.00206
57000.0	520.7	-15.0	-0.3	51.4	1.00206
57500.0	520.7	-15.0	-0.3	51.4	1.00206
58000.0	520.7	-15.0	-0.3	51.4	1.00206
58500.0	520.7	-15.0	-0.3	51.4	1.00206
59000.0	520.7	-15.0	-0.3	51.4	1.00206
59500.0	520.7	-15.0	-0.3	51.4	1.00206
60000.0	520.7	-15.0	-0.3	51.4	1.00206
60500.0	520.7	-15.0	-0.3	51.4	1.00206
61000.0	520.7	-15.0	-0.3	51.4	1.00206
61500.0	520.7	-15.0	-0.3	51.4	1.00206
62000.0	520.7	-15.0	-0.3	51.4	1.00206
62500.0	520.7	-15.0	-0.3	51.4	1.00206
63000.0	520.7	-15.0	-0.3	51.4	1.00206
63500.0	520.7	-15.0	-0.3	51.4	1.00206
64000.0	520.7	-15.0	-0.3	51.4	1.00206
64500.0	520.7	-15.0	-0.3	51.4	1.00206
65000.0	520.7	-15.0	-0.3	51.4	1.00206
65500.0	520.7	-15.0	-0.3	51.4	1.00206
66000.0	520.7	-15.0	-0.3	51.4	1.00206
66500.0	520.7	-15.0	-0.3	51.4	1.00206
67000.0	520.7	-15.0	-0.3	51.4	1.00206
67500.0	520.7	-15.0	-0.3	51.4	1.00206
68000.0	520.7	-15.0	-0.3	51.4	1.00206
68500.0	520.7	-15.0	-0.3	51.4	1.00206
69000.0	520.7	-15.0	-0.3	51.4	1.00206
69500.0	520.7	-15.0	-0.3	51.4	1.00206
70000.0	520.7	-15.0	-0.3	51.4	1.00206
70500.0	520.7	-15.0	-0.3	51.4	1.00206
71000.0	520.7	-15.0	-0.3	51.4	1.00206
71500.0	520.7	-15.0	-0.3	51.4	1.00206
72000.0	520.7	-15.0	-0.3	51.4	1.00206
72500.0	520.7	-15.0	-0.3	51.4	1.00206
73000.0	520.7	-15.0	-0.3	51.4	1.00206
73500.0	520.7	-15.0	-0.3	51.4	1.00206
74000.0	520.7	-15.0	-0.3	51.4	1.00206
74500.0	520.7	-15.0	-0.3	51.4	1.00206
75000.0	520.7	-15.0	-0.3	51.4	1.00206
75500.0	520.7	-15.0	-0.3	51.4	1.00206
76000.0	520.7	-15.0	-0.3	51.4	1.00206
76500.0	520.7	-15.0	-0.3	51.4	1.00206
77000.0	520.7	-15.0	-0.3	51.4	1.00206
77500.0	520.7	-15.0	-0.3	51.4	1.00206
78000.0	520.7	-15.0	-0.3	51.4	1.00206
78500.0	520.7	-15.0	-0.3	51.4	1.00206
79000.0	520.7	-15.0	-0.3	51.4	1.00206
79500.0	520.7	-15.0	-0.3	51.4	1.00206
80000.0	520.7	-15.0	-0.3	51.4	1.00206
80500.0	520.7	-15.0	-0.3	51.4	1.00206
81000.0	520.7	-15.0	-0.3	51.4	1.00206
81500.0	520.7	-15.0	-0.3	51.4	1.00206
82000.0	520.7	-15.0	-0.3	51.4	1.00206
82500.0	520.7	-15.0	-0.3	51.4	1.00206
83000.0	520.7	-15.0	-0.3	51.4	1.00206
83500.0	520.7	-15.0	-0.3	51.4	1.00206
84000.0	520.7	-15.0	-0.3	51.4	1.00206
84500.0	520.7	-15.0	-0.3	51.4	1.00206
85000.0	520.7	-15.0	-0.3	51.4	1.00206
85500.0	520.7	-15.0	-0.3	51.4</	

STATION ALTITUDE 1097.70 FEET MSL  
 > JULY 94  
 ASCENSTON NO. 176

UPPER AIR DATA  
 196040124  
 S 80°

TABLE 18 Cont'd

ATMOSPHERIC PRESSURE	TEMPERATURE	REFL.HUM.	DENSITY	WIND DATA
ALTITUDE	AIR DRYPOINT	GM/CUBIC PERCENT	SPEED OF	INDEX
MSL FEET	DEGREES FAHRENHEIT	METER	DIRECTION	OF
			KNOTS	REFRACTION
4750.0	-16.0	-21.2	26.0	1.000171
4170.0	-17.3	-22.8	24.2	1.000179
4190.0	-17.9	-21.7	28.5	1.000177
4150.0	-18.5	-20.9	22.9	1.000125
4000.0			576.0	624.6
			56.0	623.3
			55.6	622.6
			56.7	621.9

ATMOSPHERIC PRESSURE	TEMPERATURE	REFL.HUM.	DENSITY	WIND DATA
ALTITUDE	AIR DRYPOINT	GM/CUBIC PERCENT	SPEED OF	INDEX
MSL FEET	DEGREES FAHRENHEIT	METER	DIRECTION	OF
			KNOTS	REFRACTION
4750.0	-16.0	-21.2	26.0	1.000171
4170.0	-17.3	-22.8	24.2	1.000179
4190.0	-17.9	-21.7	28.5	1.000177
4150.0	-18.5	-20.9	22.9	1.000125
4000.0			576.0	624.6
			56.0	623.3
			55.6	622.6
			56.7	621.9

STATION ALTITUDE 3907.70 FEET MSL  
 2 JULY 64  
 STATION NO. 176

MANDATORY LEVELS  
 146040402H  
 5 \* 8

GEODETIC COORDINATES  
 32.48032 LAT DEG  
 106.42107 LONG DEG

TABLE 19

PRESSURE MILLIBARS	GEOPOTENTIAL HEIGHT	TEMPERATURE			WIND DATA	
		Degress	AIR DEPOINT CENTIGRADE	RFL.HUM. PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5012.0	22.0	11.5	49.	156.3	7.3
900.0	4759.0	18.1	11.2	60.	187.0	8.4
750.0	8564.0	15.0	7.4	57.	243.0	8.6
700.0	10470.0	12.0	4.5	60.	292.6	10.7
450.0	2500.0	7.0	1.1	65.	328.8	10.3
400.0	16646.0	2.1	-1.7	75.	27.8	9.9
350.0	16034.0	-2.5	-7.4	92.	67.6	8.4
300.0	16402.0	-6.0	-7.2	98.	84.3	6.8
450.0	12074.0	-12.7	-21.0	50.	252.5	7.7
200.0	74085.0	-19.5	-30.7	33.		

CATION ALTITUDE 4,200 FEET MSL  
JULY 9, 1962  
ASCENSION NO. 11 1130 MDT

## SIGNIFICANT LEVEL DATA

GEODETIC COORDINATES  
32° 57' 22" LAT  
105° 29' 43" LONG

TABLE 20

PRESSURE GEOMETRIC MILLIBARS MSL FEET	ALTITUDE DEGREES	TEMPERATURE DEGREES CENTIGRADE	AIR DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
272.7	4003.7	28.8	15.3	44.0
275.5	4176.5	26.8	10.9	37.0
277.1	4225.1	22.9	11.9	50.0
284.2	7225.5	15.5	10.2	55.0
287.7	7577.7	17.5	7.2	58.0
290.9	9333.4	14.3	5.7	54.0
292.0	11450.6	12.1	6.3	59.0
295.1	13106.5	5.3	1.1	55.0
292.3	15352.4	-5	-1.3	31.0
290.0	19228.7	-7.5	-7.3	23.0
286.4	23522.7	-9.5	-11.1	32.0
285.5	21203.2	-11.2	-17.6	51.0
280.2	22851.3	-10.8	-19.3	47.0
279.7	23815.6	-13.2	-23.0	29.0
270.0	25012.6	-15.3	-28.7	35.0

STATION ALTITUDE 4722.69 FEET MSL  
JULY 4, 1967  
SECTION NO. 13 1130 MDT

UPPER AIR DATA  
19670204  
60N

GEODETIC COORDINATES  
52.57° N LAT DE  
106.2943° LON DE

TABLE 21

GEODETIC PRESSURE SLI. F.FT.	TEMPERATURE AIR DEGREES CENTIGRADE	DELIQUID DEGREES CENTIGRADE	AIR DEPOINT CENTIGRADE	DENSITY PERCENT	SOUND METERS KNOTS	SPEED OF WIND KNOTS	DIRECTION DEGREES (W)	CAMP CATS	INDEX OF REFRACTION
207.7	57.6	28.3	15.3	4.40	1007.1	57.9	170.1	13.0	1.0002297
250.0	55.7	25.1	11.5	4.23	1024.1	67.4	171.3	12.4	1.0002282
300.0	54.9	22.9	11.9	4.03	997.9	57.2	176.1	11.8	1.0002282
351.0	53.5	21.5	11.7	3.83	930.3	57.0	176.5	11.2	1.0002279
400.0	52.0	20.1	11.3	3.63	958.2	55.9	179.2	10.6	1.0002275
450.0	50.6	18.7	10.9	3.43	930.7	55.7	182.3	10.0	1.0002271
500.0	49.1	17.3	10.5	3.23	947.4	55.5	195.0	9.4	1.0002267
550.0	47.6	16.0	10.1	3.03	928.4	55.3	215.0	8.8	1.0002262
600.0	46.1	14.6	9.7	2.83	911.8	55.1	232.2	8.2	1.0002259
650.0	44.6	13.2	9.3	2.63	879.8	54.9	232.2	7.6	1.0002255
700.0	43.1	11.8	8.9	2.43	898.4	54.7	247.3	7.1	1.0002248
750.0	41.6	10.4	8.5	2.23	895.5	54.5	252.2	6.5	1.0002241
800.0	39.1	9.0	8.1	2.03	947.3	52.3	271.7	5.9	1.0002235
850.0	37.6	7.6	7.7	1.83	870.5	50.1	280.5	5.3	1.0002232
900.0	36.1	6.2	7.3	1.63	852.9	48.9	289.5	4.7	1.0002228
950.0	34.6	4.8	6.9	1.43	870.3	47.7	292.9	4.1	1.0002224
1000.0	33.1	3.4	6.5	1.23	824.2	45.5	292.9	3.5	1.0002220
1050.0	31.6	2.0	6.1	1.03	814.5	44.3	321.4	3.0	1.0002215
1100.0	29.1	0.6	5.7	0.83	827.2	43.1	333.2	2.4	1.0002211
1150.0	27.6	-1.8	5.3	0.63	792.0	55.2	355.7	2.0	1.0002207
1200.0	26.1	-3.2	5.1	0.43	730.5	55.0	357.1	1.4	1.0002204
1250.0	24.6	-4.6	4.9	0.23	760.4	56.9	360.0	0.8	1.0002203
1300.0	23.1	-6.0	4.7	0.03	758.4	56.8	363.4	0.3	1.0002203
1350.0	21.6	-7.4	4.5	-1.6	742.5	56.5	351.9	0.3	1.0002195
1400.0	20.1	-8.8	4.3	-3.3	726.4	55.2	352.4	0.2	1.0002197
1450.0	18.6	-10.2	4.1	-5.0	730.5	55.0	357.1	0.2	1.0002194
1500.0	17.1	-11.6	3.9	-6.7	760.4	56.9	363.4	0.2	1.0002193
1550.0	15.6	-13.0	3.7	-8.4	758.4	56.8	360.0	0.2	1.0002193
1600.0	14.1	-14.4	3.5	-10.1	742.5	56.5	351.9	0.3	1.0002195
1650.0	12.6	-15.8	3.3	-11.8	726.4	55.2	352.4	0.2	1.0002197
1700.0	11.1	-17.2	3.1	-13.5	730.5	55.0	357.1	0.2	1.0002194
1750.0	9.6	-18.6	2.9	-15.2	760.4	56.9	363.4	0.2	1.0002193
1800.0	8.1	-20.0	2.7	-16.9	758.4	56.8	360.0	0.2	1.0002193
1850.0	6.6	-21.4	2.5	-18.6	742.5	56.5	351.9	0.3	1.0002195
1900.0	5.1	-22.8	2.3	-20.3	726.4	55.2	352.4	0.2	1.0002197
1950.0	3.6	-24.2	2.1	-22.0	730.5	55.0	357.1	0.2	1.0002194
2000.0	2.1	-25.6	1.9	-23.7	760.4	56.9	363.4	0.2	1.0002193
2050.0	0.6	-27.0	1.7	-25.4	758.4	56.8	360.0	0.2	1.0002193
2100.0	-0.9	-28.4	1.5	-27.1	742.5	56.5	351.9	0.3	1.0002195
2150.0	-2.4	-29.8	1.3	-28.8	726.4	55.2	352.4	0.2	1.0002197
2200.0	-3.9	-31.2	1.1	-30.5	730.5	55.0	357.1	0.2	1.0002194
2250.0	-5.4	-32.6	0.9	-32.2	760.4	56.9	363.4	0.2	1.0002193
2300.0	-6.9	-34.0	0.7	-33.9	758.4	56.8	360.0	0.2	1.0002193
2350.0	-8.4	-35.4	0.5	-35.6	742.5	56.5	351.9	0.3	1.0002195
2400.0	-9.9	-36.8	0.3	-37.3	726.4	55.2	352.4	0.2	1.0002197
2450.0	-11.4	-38.2	0.1	-39.0	730.5	55.0	357.1	0.2	1.0002194
2500.0	-12.9	-39.6	-0.2	-40.7	760.4	56.9	363.4	0.2	1.0002193
2550.0	-14.4	-41.0	-0.4	-42.4	758.4	56.8	360.0	0.2	1.0002193
2600.0	-15.9	-42.4	-0.6	-44.1	742.5	56.5	351.9	0.3	1.0002195
2650.0	-17.4	-43.8	-0.8	-45.8	726.4	55.2	352.4	0.2	1.0002197
2700.0	-18.9	-45.2	-1.0	-47.5	730.5	55.0	357.1	0.2	1.0002194
2750.0	-20.4	-46.6	-1.2	-49.2	760.4	56.9	363.4	0.2	1.0002193
2800.0	-21.9	-48.0	-1.4	-50.9	758.4	56.8	360.0	0.2	1.0002193
2850.0	-23.4	-49.4	-1.6	-52.6	742.5	56.5	351.9	0.3	1.0002195
2900.0	-24.9	-50.8	-1.8	-54.3	726.4	55.2	352.4	0.2	1.0002197
2950.0	-26.4	-52.2	-2.0	-56.0	730.5	55.0	357.1	0.2	1.0002194
3000.0	-27.9	-53.6	-2.2	-57.7	760.4	56.9	363.4	0.2	1.0002193
3050.0	-29.4	-55.0	-2.4	-59.4	758.4	56.8	360.0	0.2	1.0002193
3100.0	-30.9	-56.4	-2.6	-61.1	742.5	56.5	351.9	0.3	1.0002195
3150.0	-32.4	-57.8	-2.8	-62.8	726.4	55.2	352.4	0.2	1.0002197
3200.0	-33.9	-59.2	-3.0	-64.5	730.5	55.0	357.1	0.2	1.0002194
3250.0	-35.4	-60.6	-3.2	-66.2	760.4	56.9	363.4	0.2	1.0002193
3300.0	-36.9	-62.0	-3.4	-67.9	758.4	56.8	360.0	0.2	1.0002193
3350.0	-38.4	-63.4	-3.6	-69.6	742.5	56.5	351.9	0.3	1.0002195
3400.0	-40.0	-64.8	-3.8	-71.3	726.4	55.2	352.4	0.2	1.0002197
3450.0	-41.5	-66.2	-4.0	-73.0	730.5	55.0	357.1	0.2	1.0002194
3500.0	-43.0	-67.6	-4.2	-74.7	760.4	56.9	363.4	0.2	1.0002193
3550.0	-44.5	-69.0	-4.4	-76.4	758.4	56.8	360.0	0.2	1.0002193
3600.0	-46.0	-70.4	-4.6	-78.1	742.5	56.5	351.9	0.3	1.0002195
3650.0	-47.5	-71.8	-4.8	-79.8	726.4	55.2	352.4	0.2	1.0002197
3700.0	-49.0	-73.2	-5.0	-81.5	730.5	55.0	357.1	0.2	1.0002194
3750.0	-50.5	-74.6	-5.2	-83.2	760.4	56.9	363.4	0.2	1.0002193
3800.0	-52.0	-76.0	-5.4	-84.9	758.4	56.8	360.0	0.2	1.0002193
3850.0	-53.5	-77.4	-5.6	-86.6	742.5	56.5	351.9	0.3	1.0002195
3900.0	-55.0	-78.8	-5.8	-88.3	726.4	55.2	352.4	0.2	1.0002197
3950.0	-56.5	-80.2	-6.0	-89.9	730.5	55.0	357.1	0.2	1.0002194
4000.0	-58.0	-81.6	-6.2	-91.6	760.4	56.9	363.4	0.2	1.0002193
4050.0	-59.5	-83.0	-6.4	-93.3	758.4	56.8	360.0	0.2	1.0002193
4100.0	-61.0	-84.4	-6.6	-95.0	742.5	56.5	351.9	0.3	1.0002195
4150.0	-62.5	-85.8	-6.8	-96.7	726.4	55.2	352.4	0.2	1.0002197
4200.0	-64.0	-87.2	-7.0	-98.4	730.5	55.0	357.1	0.2	1.0002194
4250.0	-65.5	-88.6	-7.2	-100.1	760.4	56.9	363.4	0.2	1.0002193
4300.0	-67.0	-90.0	-7.4	-101.8	758.4	56.8	360.0	0.2	1.0002193
4350.0	-68.5	-91.4	-7.6	-103.5	742.5	56.5	351.9	0.3	1.0002195
4400.0	-70.0	-92.8	-7.8	-105.2	726.4	55.2	352.4	0.2	1.0002197
4450.0	-71.5	-94.2	-8.0	-106.9	730.5	55.0	357.1	0.2	1.0002194
4500.0	-73.0	-95.6	-8.2	-108.6	760.4	56.9	363.4	0.2	1.0002193
4550.0	-74.5	-97.0	-8.4	-110.3	758.4	56.8	360.0	0.2	1.0002193
4600.0	-76.0	-98.4	-8.6	-112.0	742.5	56.5	351.9	0.3	1.0002195
4650.0	-77.5	-99.8	-8.8	-113.7	726.4	55.2	352.4	0.2	1.0002197
4700.0	-79.0	-101.2	-9.0	-115.4	730.5	55.0	357.1	0.2	1.0002194
4750.0	-80.5	-102.6	-9.2	-117.1	760.4	56.9	363.4	0.2	1.0002193
4800.0	-82.0	-104.0	-9.4	-118.8	758.4	56.8	360.0	0.2	1.0002193
4850.0	-83.5	-105.4	-9.6	-120.5	742.5	56.5	351.9	0.3	1.0002195
4900.0	-85.0	-106.8	-9.8	-122.2	726.4	55.2	352.4	0.2	1.0002197
4950.0	-86.5	-108.2	-10.0	-123.9	730.5	55.0	357.1	0.2	1.0002194
5000.0	-88.0	-109.6	-10.2	-125.6	760.4	56.9	363.4	0.2	1.0002193
5050.0	-89.5	-111.0	-10.4	-127.3	758.4	56.8	360.0	0.2	1.0002193
5100.0	-91.0	-112.4	-10.6	-129.0	742.5	56.5	351.9	0.3	1.0002195
5150.0	-92.5	-113.8	-10.8	-130.7	726.4	55.2	352.4	0.2	1.0002197
5200.0	-94.0	-115.2	-11.0	-132.4	730.5	55.0	357.1	0.2	1.0002194
5250.0	-95.5	-116.6	-11.2	-134.1	760.4	56.9	363.4	0.2	1.0002193
5300.0	-97.0	-118.0	-11.4	-135.8	758.4	56.8	360.0	0.2	1.0002193
5350.0	-98.5	-119.4	-11.6	-137.5	742.5</				

STATION ALTITUDE 6200.0 FEET MSL  
 JULY 2,  
 ASCENSION NO. 1

UPPER AIR DATA  
 1840Z 13  
 '0"

1130 MDT

GEODETIC COORDINATES  
 52° 57' 23" LAT  
 136° 24' 43" LONG  
 1 DEG  
 10 MIN

TABLE 21 Cont'd

STATION	PRESSURE	TEMPERATURE	REL HUM.	SPEED OF	DIRECTION	WIND DATA	INDEX
ALITUDE	AIR	DEPOTNT	PERCENT	SOUND	ACCUITY	SPEED	OF
MSL F.T.	MILLIBARS	DEGREES CENTIGRADE		KNOTS	DEGREES	KNOTS	REFRACTION
24362.3	616.6	-16.6	72.1	29.3	550.5	525.9	1.000125
24510.3	605.2	-15.9	72.3	32.4	552.0	525.4	1.000125
25000.0	600.2	-15.9	73.7	34.9	543.7	523.9	1.000124

STATION NUMBER 40001  
2 JULY 34  
ASCENSION NO. 1  
ASCENTION NO. 1130 MDT

WIND TOWER LEVELS  
1040210011  
NOON

SATELLITES  
32.5722 LAT  
136.29453 LONG

TABLE 22

PRESSURE MILLIBARS	SEASCAPE FEET	TEMPERATURE DEGREES CENTIGRADE	AIR DEPOINT PERCENT	REL.HUM. PERCENT	WIND (KMH)	
					DIRECTION DEGREES (IN) < 90°	SPEED DEGREES (IN) > 90°
106.0	6991.	22.9	11.2	50.	176.1	11.5
105.0	5712.	18.3	10.7	51.	156.1	2.7
105.0	8545.	15.4	7.7	55.	242.2	2.1
105.0	10441.	12.1	6.1	59.	239.5	2.3
105.0	12444.	7.5	1.2	54.	337.2	8.7
105.0	14441.	2.4	-0.7	50.	22.8	13.3
105.0	16021.	-2.7	-4.0	92.	57.4	2.0
105.0	19751.	-7.3	-9.7	89.	37.9	2.2
105.0	22062.	-10.3	-12.9	67.	252.1	7.5
105.0	24753.	-16.7	-29.7	45.		

STATION ALTITUDE 9000.0 FT 45°  
2 JUL 64 1319 MDT  
SCREEN NO. 34C

SIGNIFICANT LEVEL DATA  
WEATHER SAWDUST

GEOMETRIC COORDINATES  
32°40'44" LAT DEG  
906°77'37" LONG DEG

TABLE 23

DEESEER GEOMETRIC WILLIAMS MSL FEET	ALTITUDE DEGREES	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL HUM. PERCENT
985.7	999.0	71.1	14.1
949.4	4354.7	78.8	12.7
950.5	4010.0	75.7	12.0
796.1	4890.1	70.7	10.2
774.2	7509.4	68.7	10.0
760.7	8194.4	77.2	9.9
739.7	3013.4	98.7	7.2
708.5	10692.8	92.4	5.0
657.6	13647.4	50.6	4.0
587.8	15786.7	-7	2.4
562.5	14061.7	-10.1	-2.8
550.5	14577.7	-7.6	-5.1
575.5	17656.4	-7.5	-7.1
517.1	10587.5	-5.6	-8.5
401.5	17610.9	-6.9	-12.3
460.5	20266.9	-8.8	-11.1
437.2	24122.5	-11.9	-6.6
450.5	20058.5	-9.3	-9.7

卷之三

GEODETIC COORDINATES

TABLE 24

CONVENTIONAL STATION	PRESSURE MILLIBARS	TEMPERATURE DEGREES REFRIGERANT GAS	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SOUND KNOTS	DIRECTION DEGREES(CTN)	SPEED OF WIND DATA KNOTS	INDEX OF REFRACTION
100000	999.0	71.1	14.5	1.000.0	681.9	150.0	0.00290	0.00170
100000	999.0	71.0	14.2	1.000.0	681.8	150.0	0.00289	0.00169
100000	999.1	72.1	12.6	1.000.0	681.5	150.0	0.00285	0.00165
100000	999.1	72.0	12.5	1.000.0	678.6	150.0	0.00280	0.00164
100000	999.2	72.0	12.7	1.000.0	684.8	150.0	0.00278	0.00162
100000	999.2	72.0	12.8	1.000.0	675.7	150.0	0.00277	0.00161
100000	999.3	71.7	11.7	1.000.0	674.1	150.0	0.00276	0.00160
100000	999.3	71.7	11.7	1.000.0	672.6	150.0	0.00272	0.00158
100000	999.4	71.7	11.7	1.000.0	670.4	150.0	0.00267	0.00157
100000	999.4	71.7	11.7	1.000.0	669.5	150.0	0.00264	0.00156
100000	999.5	71.7	11.7	1.000.0	662.5	150.0	0.00262	0.00155
100000	999.5	71.7	11.7	1.000.0	659.7	150.0	0.00256	0.00154
100000	999.6	71.7	11.7	1.000.0	655.0	150.0	0.00250	0.00153
100000	999.6	71.7	11.7	1.000.0	651.8	150.0	0.00247	0.00152
100000	999.7	71.7	10.7	1.000.0	648.2	150.0	0.00243	0.00151
100000	999.7	71.7	10.7	1.000.0	642.4	150.0	0.00240	0.00150
100000	999.8	71.7	10.2	1.000.0	639.7	150.0	0.00238	0.00149
100000	999.8	71.7	10.2	1.000.0	635.9	150.0	0.00236	0.00148
100000	999.9	71.7	10.2	1.000.0	632.0	150.0	0.00232	0.00147
100000	999.9	71.7	10.2	1.000.0	629.2	150.0	0.00227	0.00146
100000	999.9	71.7	10.2	1.000.0	625.4	150.0	0.00224	0.00145
100000	999.9	71.7	10.2	1.000.0	621.6	150.0	0.00221	0.00144
100000	999.9	71.7	10.2	1.000.0	617.8	150.0	0.00219	0.00143
100000	999.9	71.7	10.2	1.000.0	614.0	150.0	0.00216	0.00142
100000	999.9	71.7	10.2	1.000.0	610.2	150.0	0.00214	0.00141
100000	999.9	71.7	10.2	1.000.0	606.4	150.0	0.00211	0.00140
100000	999.9	71.7	10.2	1.000.0	602.6	150.0	0.00208	0.00139
100000	999.9	71.7	10.2	1.000.0	598.8	150.0	0.00205	0.00138
100000	999.9	71.7	10.2	1.000.0	595.0	150.0	0.00202	0.00137
100000	999.9	71.7	10.2	1.000.0	591.2	150.0	0.00201	0.00136
100000	999.9	71.7	10.2	1.000.0	587.4	150.0	0.00198	0.00135
100000	999.9	71.7	10.2	1.000.0	583.6	150.0	0.00196	0.00134
100000	999.9	71.7	10.2	1.000.0	579.8	150.0	0.00194	0.00133
100000	999.9	71.7	10.2	1.000.0	576.0	150.0	0.00192	0.00132
100000	999.9	71.7	10.2	1.000.0	572.2	150.0	0.00190	0.00131
100000	999.9	71.7	10.2	1.000.0	568.4	150.0	0.00188	0.00130
100000	999.9	71.7	10.2	1.000.0	564.6	150.0	0.00186	0.00129
100000	999.9	71.7	10.2	1.000.0	560.8	150.0	0.00184	0.00128
100000	999.9	71.7	10.2	1.000.0	557.0	150.0	0.00182	0.00127
100000	999.9	71.7	10.2	1.000.0	553.2	150.0	0.00180	0.00126
100000	999.9	71.7	10.2	1.000.0	549.4	150.0	0.00178	0.00125
100000	999.9	71.7	10.2	1.000.0	545.6	150.0	0.00176	0.00124
100000	999.9	71.7	10.2	1.000.0	541.8	150.0	0.00174	0.00123
100000	999.9	71.7	10.2	1.000.0	538.0	150.0	0.00172	0.00122
100000	999.9	71.7	10.2	1.000.0	534.2	150.0	0.00171	0.00121
100000	999.9	71.7	10.2	1.000.0	530.4	150.0	0.00170	0.00120
100000	999.9	71.7	10.2	1.000.0	526.6	150.0	0.00168	0.00119
100000	999.9	71.7	10.2	1.000.0	522.8	150.0	0.00167	0.00118
100000	999.9	71.7	10.2	1.000.0	519.0	150.0	0.00167	0.00117
100000	999.9	71.7	10.2	1.000.0	515.2	150.0	0.00167	0.00116
100000	999.9	71.7	10.2	1.000.0	511.4	150.0	0.00167	0.00115
100000	999.9	71.7	10.2	1.000.0	507.6	150.0	0.00167	0.00114
100000	999.9	71.7	10.2	1.000.0	503.8	150.0	0.00167	0.00113
100000	999.9	71.7	10.2	1.000.0	500.0	150.0	0.00167	0.00112
100000	999.9	71.7	10.2	1.000.0	496.2	150.0	0.00167	0.00111
100000	999.9	71.7	10.2	1.000.0	492.4	150.0	0.00167	0.00110
100000	999.9	71.7	10.2	1.000.0	488.6	150.0	0.00167	0.00109
100000	999.9	71.7	10.2	1.000.0	484.8	150.0	0.00167	0.00108
100000	999.9	71.7	10.2	1.000.0	481.0	150.0	0.00167	0.00107
100000	999.9	71.7	10.2	1.000.0	477.2	150.0	0.00167	0.00106
100000	999.9	71.7	10.2	1.000.0	473.4	150.0	0.00167	0.00105
100000	999.9	71.7	10.2	1.000.0	469.6	150.0	0.00167	0.00104
100000	999.9	71.7	10.2	1.000.0	465.8	150.0	0.00167	0.00103
100000	999.9	71.7	10.2	1.000.0	462.0	150.0	0.00167	0.00102
100000	999.9	71.7	10.2	1.000.0	458.2	150.0	0.00167	0.00101
100000	999.9	71.7	10.2	1.000.0	454.4	150.0	0.00167	0.00100
100000	999.9	71.7	10.2	1.000.0	450.6	150.0	0.00167	0.00099
100000	999.9	71.7	10.2	1.000.0	446.8	150.0	0.00167	0.00098
100000	999.9	71.7	10.2	1.000.0	443.0	150.0	0.00167	0.00097
100000	999.9	71.7	10.2	1.000.0	439.2	150.0	0.00167	0.00096
100000	999.9	71.7	10.2	1.000.0	435.4	150.0	0.00167	0.00095
100000	999.9	71.7	10.2	1.000.0	431.6	150.0	0.00167	0.00094
100000	999.9	71.7	10.2	1.000.0	427.8	150.0	0.00167	0.00093
100000	999.9	71.7	10.2	1.000.0	424.0	150.0	0.00167	0.00092
100000	999.9	71.7	10.2	1.000.0	419.2	150.0	0.00167	0.00091
100000	999.9	71.7	10.2	1.000.0	415.4	150.0	0.00167	0.00090
100000	999.9	71.7	10.2	1.000.0	411.6	150.0	0.00167	0.00089
100000	999.9	71.7	10.2	1.000.0	407.8	150.0	0.00167	0.00088
100000	999.9	71.7	10.2	1.000.0	404.0	150.0	0.00167	0.00087
100000	999.9	71.7	10.2	1.000.0	400.2	150.0	0.00167	0.00086
100000	999.9	71.7	10.2	1.000.0	396.4	150.0	0.00167	0.00085
100000	999.9	71.7	10.2	1.000.0	392.6	150.0	0.00167	0.00084
100000	999.9	71.7	10.2	1.000.0	388.8	150.0	0.00167	0.00083
100000	999.9	71.7	10.2	1.000.0	385.0	150.0	0.00167	0.00082
100000	999.9	71.7	10.2	1.000.0	381.2	150.0	0.00167	0.00081
100000	999.9	71.7	10.2	1.000.0	377.4	150.0	0.00167	0.00080
100000	999.9	71.7	10.2	1.000.0	373.6	150.0	0.00167	0.00079
100000	999.9	71.7	10.2	1.000.0	369.8	150.0	0.00167	0.00078
100000	999.9	71.7	10.2	1.000.0	366.0	150.0	0.00167	0.00077
100000	999.9	71.7	10.2	1.000.0	362.2	150.0	0.00167	0.00076
100000	999.9	71.7	10.2	1.000.0	358.4	150.0	0.00167	0.00075
100000	999.9	71.7	10.2	1.000.0	354.6	150.0	0.00167	0.00074
100000	999.9	71.7	10.2	1.000.0	350.8	150.0	0.00167	0.00073
100000	999.9	71.7	10.2	1.000.0	347.0	150.0	0.00167	0.00072
100000	999.9	71.7	10.2	1.000.0	343.2	150.0	0.00167	0.00071
100000	999.9	71.7	10.2	1.000.0	339.4	150.0	0.00167	0.00070
100000	999.9	71.7	10.2	1.000.0	335.6	150.0	0.00167	0.00069
100000	999.9	71.7	10.2	1.000.0	331.8	150.0	0.00167	0.00068
100000	999.9	71.7	10.2	1.000.0	328.0	150.0	0.00167	0.00067
100000	999.9	71.7	10.2	1.000.0	324.2	150.0	0.00167	0.00066
100000	999.9	71.7	10.2	1.000.0	320.4	150.0	0.00167	0.00065
100000	999.9	71.7	10.2	1.000.0	316.6	150.0	0.00167	0.00064
100000	999.9	71.7	10.2	1.000.0	312.8	150.0	0.00167	0.00063
100000	999.9	71.7	10.2	1.000.0	309.0	150.0	0.00167	0.00062
100000	999.9	71.7	10.2	1.000.0	305.2	150.0	0.00167	0.00061
100000	999.9	71.7	10.2	1.000.0	301.4	150.0	0.00167	0.00060
100000	999.9	71.7	10.2	1.000.0	297.6	150.0	0.00167	0.00059
100000	999.9	71.7	10.2	1.000.0	293.8	150.0	0.00167	0.00058
100000	999.9	71.7	10.2	1.000.0	290.0	150.0	0.00167	0.00057
100000	999.9	71.7	10.2	1.000.0	286.2	150.0	0.00167	0.00056
100000	999.9	71.7	10.2	1.000.0	282.4	150.0	0.00167	0.00055
100000	999.9	71.7	10.2	1.000.0	278.6	150.0	0.00167	0.00054
100000	999.9	71.7	10.2	1.000.0	274.8	150.0	0.00167	0.00053
100000	999.9	71.7	10.2	1.000.0	271.0	150.0	0.00167	0.00052
100000	999.9	71.7	10.2	1.000.0	267.2	150.0	0.00167	0.00051
100000	999.9	71.7	10.2	1.000.0	263.4	150.0	0.00167	0.00050
100000	999.9	71.7	10.2	1.000.0	259.6	150.0	0.00167	0.00049
100000	999.9	71.7	10.2	1.000.0	255.8	150.0	0.00167	0.00048
100000	999.9	71.7	10.2	1.000.0	252.0	150.0	0.00167	0.00047
100000	999.9	71.7	10.2	1.000.0	248.2	150.0	0.00167	0.00046
100000</								

STATION: LATITUDE 30°0.00' FREE. SEC  
 2 JULY 64 1319 MDT  
 SURFACE 40. 340

UPPER AIR DATA  
 104.000-60  
 WHITE SANDS

GEOMETRIC COORDINATES  
 32.40N LAT DEG  
 106.17W LON DEG

TABLE 24, Cont'd

CONVENTIONAL PRESSURE	DEPRESSION	TEMPERATURE	RFL. HUM.	DENSITY	SPEED OF	WIND DATA
ATMOS.	MM	10 <sup>3</sup> DRYPOINT	MM/SEC	GM/SEC	SOUND	DIRECTION
ML FEET	MILLIBARS	DEGREES C	METER	KNOTS	KNOTS	SPEED
7450.0	625.0	-12.0	-27.0	560.8	628.6	266.0
7400.0	617.3	-12.3	-27.5	561.5	626.9	1.000129
7450.0	609.1	-12.7	-28.0	557.8	625.2	1.000127
7500.0	600.9	-17.1	-28.7	544.9	623.5	1.000125

INDEX OF  
REFRACTION

OF  
REFRACTION

REFRACTION

STATION ALTITUDE 4950.00 FEET "S1  
 JULY 04  
 ASCENTION NO. 1  
 1319 MDT

MANUFACTORY LEVELS  
 19400206  
 WHITE SANDS  
 TABLE 25

GEODETIC COORDINATES  
 32°40'04" LAT DEG  
 106°47'03" LON DEG

PRESSURE GEOPOTENTIAL MILLIBARS	REFCT	TEMPERATURE		PERCENT DEFL.HUM.	WIND DATA	
		ATM DEGREES	NEWPOINT CENTIGRADF		DIRECTION DEGREES(TN)	SPEED KNOTS
950.0	5607.	25.0	17.0	43.	150.6	7.1
960.0	6744.	21.1	10.4	50.	188.5	7.7
970.0	8866.	16.5	8.1	58.	260.0	8.4
980.0	10687.	12.6	7.0	56.	214.5	11.0
990.0	12505.	7.0	1.0	65.	157.4	9.1
1000.0	14444.	1.0	-1.0	82.	64.9	10.1
1010.0	16029.	-7.0	-5.0	81.	38.0	6.1
1020.0	10797.	-6.0	-12.7	65.	177.8	5.6
1030.0	22076.	-10.0	-20.0	72.	259.9	7.9
1040.0	15116.	-17.0	-20.7	76.		

STATION ALTITUDE 12000 FT. MSL  
JULY 31<sup>st</sup>  
ASCENSION ISL.

## SIGNIFICANT LEVEL DATA

1840Z JET

S.W.P.

1319 MDT

TABLE 26

GEOGRAPHIC COORDINATES  
32°45'06" LAT N  
136°42'37" LON E

PRESSURE MILLIBARS	CLOUD HEIGHT FEET	ALTITUDE FEET	TEMPERATURE DEGREES CENTIGRADE	REL HUM. PERCENT
960.2	7927.3	30.0	16.3	60.0
872.3	4311.3	17.3	12.2	35.0
850.0	5013.9	26.4	11.7	40.0
750.3	7465.5	19.5	10.0	54.0
740.3	2721.7	13.9	9.0	55.0
730.3	10592.1	12.6	5.1	50.0
605.5	11625.3	9.6	1.5	57.0
591.8	15246.2	1.5	-1.1	95.0
596.2	14654.2	-2.2	-4.2	96.0
575.7	13152.1	-4.3	-7.3	59.0
500.7	16447.6	-6.4	-11.5	57.0
486.8	21441.2	-7.1	-15.6	46.0
453.2	21955.2	-11.5	-25.9	26.0
443.2	22523.0	-13.1	-33.7	20.0
407.7	24615.7	-16.0	-73.5	12.0
350.3	25098.3	-15.7	-75.0	15.0

STATION ALTITUDE 2907.7' MSL  
JULY 5, 1319 MDT  
ASCENSION NO. 127

UPPER AIR DATA  
1840C 6127  
e n b

EFFECTIVE COORDINATES  
32.46034 LAT N  
106.42337 LON ECG

TABLE 27

GEOMETRIC PRESSURE ALTITUDE KSL FEET	TEMPERATURE DEPRES. MILLIBARS CENTIGRADE	REL. HUM. PERCENT	SPEED OF WIND DATA MFTFR	DIRECTION DEGREES(CN)	SPEED KNOTS	INDEX OF REFRACTION
1997.3	70.0	14.3	1004.1	130.0	3.0	1.000264
4510.0	70.0	14.9	1004.1	150.0	3.0	1.000264
4512.0	865.2	16.1	88.5	677.5	3.6	1.000261
4516.0	853.4	11.7	61.0	876.4	3.2	1.000277
5530.0	875.7	55.4	42.8	975.3	3.0	1.000274
6010.0	521.2	73.8	11.2	574.3	2.9	1.000271
6510.0	597.0	22.2	16.5	573.2	2.9	1.000271
7500.0	793.1	20.4	16.3	670.3	2.2	1.000267
7500.0	779.4	19.4	6.3	622.5	2.4	1.000264
8500.0	765.6	18.4	9.0	558.3	2.5	1.000260
8510.0	752.1	16.7	9.2	617.1	1.9	1.000255
9510.0	775.8	15.0	6.7	575.4	2.2	1.000253
9530.0	725.7	16.4	6.2	562.5	2.5	1.000249
10000.0	711.5	15.4	7.0	552.3	2.3	1.000245
10500.0	760.1	12.0	5.1	551.2	2.3	1.000243
11000.0	697.4	11.3	3.3	550.9	2.2	1.000242
11510.0	675.0	10.4	4.5	653.9	1.8	1.000241
12000.0	561.6	9.3	1.5	652.3	1.6	1.000240
12510.0	555.9	7.2	1.3	651.2	1.4	1.000239
13000.0	678.6	6.0	0.9	650.4	1.2	1.000238
13500.0	676.9	5.4	0.6	650.1	1.0	1.000237
14000.0	515.7	3.7	0.1	71.6	0.7	1.000236
14510.0	614.5	2.7	-0.4	76.0	0.6	1.000235
15000.0	565.9	1.1	-1.0	85.5	0.5	1.000234
15500.0	351.7	0.1	-2.0	96.0	0.4	1.000233
16000.0	379.6	-0.2	-0.9	26.0	0.3	1.000232
16510.0	360.1	-1.3	-2.9	36.0	0.2	1.000231
17000.0	349.5	-2.7	-5.7	31.5	0.1	1.000230
17510.0	379.5	-3.6	-7.0	75.0	0.0	1.000229
18000.0	349.2	-4.1	-6.6	50.8	-0.1	1.000228
18510.0	358.7	-4.7	-5.3	57.7	-0.2	1.000227
19000.0	358.7	-5.7	-10.7	57.3	-0.3	1.000226
19510.0	495.1	-0.6	-11.8	55.6	-0.5	1.000225
20000.0	495.1	-0.9	-16.9	52.6	-0.7	1.000224
20500.0	479.2	-7.2	-17.9	43.3	-0.8	1.000223
21000.0	479.2	-9.0	-20.5	38.0	-0.9	1.000222
21500.0	451.4	-7.9	-22.4	20.6	-0.8	1.000221
22000.0	451.4	-10.3	-26.2	27.6	-1.0	1.000220
22500.0	443.6	-9.1	-26.9	26.3	-0.9	1.000219
23000.0	443.6	-10.5	-26.5	32.0	-0.8	1.000218
23500.0	579.5	-7.5	-26.0	51.0	-0.7	1.000217
24000.0	579.5	-10.7	-26.7	51.0	-0.6	1.000216
24500.0	579.5	-10.1	-26.0	52.0	-0.5	1.000215
25000.0	579.5	-9.1	-25.3	52.0	-0.4	1.000214
25500.0	579.5	-8.1	-25.0	52.0	-0.3	1.000213
26000.0	579.5	-7.1	-24.7	52.0	-0.2	1.000212
26500.0	579.5	-6.1	-24.4	52.0	-0.1	1.000211
27000.0	579.5	-5.1	-24.1	52.0	0.0	1.000210

STATION ALTITUDE 12,170 FEET "SL  
JULY 12, 1967 1318 MDT  
ASCENSION NO. 127

UPPER AIR DATA  
180001Z  
C

S E P T E M B E R  
32.6036 LAT DEG  
136.4237 LONG DEG

TABLE 27 Cont'd

ALTIMETER	PRESSURE	TEMPERATURE AT DEPOINT	REL.HUM. PERCENT	SPEED OF WIND KNOTS	DIRECTION DEGREES(TW) KNOTS	INDEX OF REFRACTION
"SL FEET	WILLIBARS	DEGREES CENTIGRADE	% CUBIC METER	METERS	DEGREES(TW)	
2350.0	429.3	-12.9	78.4	25.6	570.2	0.23370
2400.0	417.9	-14.5	76.5	56.7	567.7	1.000175
2450.0	409.6	-15.7	78.8	71.3	557.9	1.700177
2500.0	401.4	-16.0	76.3	42.5	544.7	1.000175

STATION ALTITUDE: 9,770' U.S. GLOBE  
 JULY 34 ASCENSION 127 1319 MDT

TABLE 28  
 STATIONARY LEVELS  
 1319 MDT  
 127  
 1319 MDT

GEODETIC COORDINATES  
 52° 48' 36" LAT DEG  
 136° 48' 37" LONG DEG

PRESSURE MILLIBARS	GEOPOTENTIAL ELEVT	TEMPERATURE DEGREES CFNTIGRADE	REL.HUM. PERCENT	WIND DATA	
				AIR DAMPPOINT	DIRECTION DEGREES(CNCS)
950.0	5010.	25.4	11.7	42.	162.3
920.0	5750.	21.5	10.6	50.	235.1
750.0	8575.	15.7	6.1	51.	262.6
720.0	10492.	12.5	6.1	62.	314.7
600.0	12512.	7.7	1.2	53.	19.1
600.0	14665.	2.0	-0.6	93.	42.9
550.0	10953.	-2.5	-5.2	82.	37.4
500.0	19420.	-5.6	-11.5	67.	315.5
450.0	22103.	-10.7	-26.6	25.	252.6
400.0	25465.	-16.7	-25.9	45.	7.9

STATION LATITUDE 32° 16' 45" N  
ELEVATION 4,131 M.  
TIME 1319 MDT  
DATE JULY 24, 1959  
SATELLITE ALTITUDE 2,572 KM  
SIGNIFICANT LEVEL DATA  
SATELLITE COORDINATES  
136° 26' 43" E  
32° 57' 23" LAT DEG

SATELLITE ALTITUDE MILLIARES MSL FEET	DEGREES GEOMETRIC SIGNIFICANT LEVEL	TEMPERATURE AIR DEPOTENT CENTIGRADE	TEMPERATURE CENTIGRADE	PERCENT REL. HUM.
4,073.7	110.7	120.4	35.0	33.0
4,352.2	110.7	110.3	53.0	53.0
4,632.7	227.5	110.3	40.0	40.0
4,912.0	256.2	110.3	57.0	57.0
5,192.4	263.6	110.3	56.0	56.0
5,472.8	174.2	90.3	51.0	51.0
5,753.2	115.5	3.2	-26.1	29.0
6,033.6	131.1	3.2	-26.1	37.0
6,314.0	111.7	-15.8	-78.0	
6,594.4	50.4	-4	60.0	
6,874.8	10.3	-5	35.0	
7,155.2	1.3	-2.0	56.0	
7,435.6	-5.3	-7.0	56.0	
7,716.0	-10.9	-16.0	67.0	
8,006.4	-19.3	-19.3	56.0	
8,286.8	-24.3	-24.3	56.0	
8,567.2	-29.3	-29.3	56.0	
8,847.6	-34.3	-34.3	56.0	
9,128.0	-39.3	-39.3	56.0	
9,408.4	-44.3	-44.3	56.0	
9,688.8	-49.3	-49.3	56.0	
9,969.2	-54.3	-54.3	56.0	
10,249.6	-59.3	-59.3	56.0	
10,520.0	-64.3	-64.3	56.0	
10,799.4	-69.3	-69.3	56.0	
11,079.8	-74.3	-74.3	56.0	
11,350.2	-79.3	-79.3	56.0	
11,629.6	-84.3	-84.3	56.0	
11,909.0	-89.3	-89.3	56.0	
12,189.4	-94.3	-94.3	56.0	
12,469.8	-99.3	-99.3	56.0	
12,749.2	-104.3	-104.3	56.0	
13,029.6	-109.3	-109.3	56.0	
13,309.0	-114.3	-114.3	56.0	
13,589.4	-119.3	-119.3	56.0	
13,869.8	-124.3	-124.3	56.0	
14,149.2	-129.3	-129.3	56.0	
14,429.6	-134.3	-134.3	56.0	
14,709.0	-139.3	-139.3	56.0	
15,089.4	-144.3	-144.3	56.0	
15,369.8	-149.3	-149.3	56.0	
15,649.2	-154.3	-154.3	56.0	
15,929.6	-159.3	-159.3	56.0	
16,209.0	-164.3	-164.3	56.0	
16,489.4	-169.3	-169.3	56.0	
16,769.8	-174.3	-174.3	56.0	
17,049.2	-179.3	-179.3	56.0	
17,329.6	-184.3	-184.3	56.0	
17,609.0	-189.3	-189.3	56.0	
17,889.4	-194.3	-194.3	56.0	
18,169.8	-199.3	-199.3	56.0	
18,449.2	-204.3	-204.3	56.0	
18,729.6	-209.3	-209.3	56.0	
19,009.0	-214.3	-214.3	56.0	
19,289.4	-219.3	-219.3	56.0	
19,569.8	-224.3	-224.3	56.0	
19,849.2	-229.3	-229.3	56.0	
20,129.6	-234.3	-234.3	56.0	
20,409.0	-239.3	-239.3	56.0	
20,689.4	-244.3	-244.3	56.0	
20,969.8	-249.3	-249.3	56.0	
21,249.2	-254.3	-254.3	56.0	
21,529.6	-259.3	-259.3	56.0	
21,809.0	-264.3	-264.3	56.0	
22,089.4	-269.3	-269.3	56.0	
22,369.8	-274.3	-274.3	56.0	
22,649.2	-279.3	-279.3	56.0	
22,929.6	-284.3	-284.3	56.0	
23,209.0	-289.3	-289.3	56.0	
23,489.4	-294.3	-294.3	56.0	
23,769.8	-299.3	-299.3	56.0	
24,049.2	-304.3	-304.3	56.0	
24,329.6	-309.3	-309.3	56.0	
24,609.0	-314.3	-314.3	56.0	
24,889.4	-319.3	-319.3	56.0	
25,169.8	-324.3	-324.3	56.0	
25,449.2	-329.3	-329.3	56.0	
25,729.6	-334.3	-334.3	56.0	
26,009.0	-339.3	-339.3	56.0	
26,289.4	-344.3	-344.3	56.0	
26,569.8	-349.3	-349.3	56.0	
26,849.2	-354.3	-354.3	56.0	
27,129.6	-359.3	-359.3	56.0	
27,409.0	-364.3	-364.3	56.0	
27,689.4	-369.3	-369.3	56.0	
27,969.8	-374.3	-374.3	56.0	
28,249.2	-379.3	-379.3	56.0	
28,529.6	-384.3	-384.3	56.0	
28,809.0	-389.3	-389.3	56.0	
29,089.4	-394.3	-394.3	56.0	
29,369.8	-399.3	-399.3	56.0	
29,649.2	-404.3	-404.3	56.0	
29,929.6	-409.3	-409.3	56.0	
30,209.0	-414.3	-414.3	56.0	
30,489.4	-419.3	-419.3	56.0	
30,769.8	-424.3	-424.3	56.0	
31,049.2	-429.3	-429.3	56.0	
31,329.6	-434.3	-434.3	56.0	
31,609.0	-439.3	-439.3	56.0	
31,889.4	-444.3	-444.3	56.0	
32,169.8	-449.3	-449.3	56.0	
32,449.2	-454.3	-454.3	56.0	
32,729.6	-459.3	-459.3	56.0	
33,009.0	-464.3	-464.3	56.0	
33,289.4	-469.3	-469.3	56.0	
33,569.8	-474.3	-474.3	56.0	
33,849.2	-479.3	-479.3	56.0	
34,129.6	-484.3	-484.3	56.0	
34,409.0	-489.3	-489.3	56.0	
34,689.4	-494.3	-494.3	56.0	
34,969.8	-499.3	-499.3	56.0	
35,249.2	-504.3	-504.3	56.0	
35,529.6	-509.3	-509.3	56.0	
35,809.0	-514.3	-514.3	56.0	
36,089.4	-519.3	-519.3	56.0	
36,369.8	-524.3	-524.3	56.0	
36,649.2	-529.3	-529.3	56.0	
36,929.6	-534.3	-534.3	56.0	
37,209.0	-539.3	-539.3	56.0	
37,489.4	-544.3	-544.3	56.0	
37,769.8	-549.3	-549.3	56.0	
38,049.2	-554.3	-554.3	56.0	
38,329.6	-559.3	-559.3	56.0	
38,609.0	-564.3	-564.3	56.0	
38,889.4	-569.3	-569.3	56.0	
39,169.8	-574.3	-574.3	56.0	
39,449.2	-579.3	-579.3	56.0	
39,729.6	-584.3	-584.3	56.0	
40,009.0	-589.3	-589.3	56.0	
40,289.4	-594.3	-594.3	56.0	
40,569.8	-599.3	-599.3	56.0	
40,849.2	-604.3	-604.3	56.0	
41,129.6	-609.3	-609.3	56.0	
41,409.0	-614.3	-614.3	56.0	
41,689.4	-619.3	-619.3	56.0	
41,969.8	-624.3	-624.3	56.0	
42,249.2	-629.3	-629.3	56.0	
42,529.6	-634.3	-634.3	56.0	
42,809.0	-639.3	-639.3	56.0	
43,089.4	-644.3	-644.3	56.0	
43,369.8	-649.3	-649.3	56.0	
43,649.2	-654.3	-654.3	56.0	
43,929.6	-659.3	-659.3	56.0	
44,209.0	-664.3	-664.3	56.0	
44,489.4	-669.3	-669.3	56.0	
44,769.8	-674.3	-674.3	56.0	
45,049.2	-679.3	-679.3	56.0	
45,329.6	-684.3	-684.3	56.0	
45,609.0	-689.3	-689.3	56.0	
45,889.4	-694.3	-694.3	56.0	
46,169.8	-699.3	-699.3	56.0	
46,449.2	-704.3	-704.3	56.0	
46,729.6	-709.3	-709.3	56.0	
47,009.0	-714.3	-714.3	56.0	
47,289.4	-719.3	-719.3	56.0	
47,569.8	-724.3	-724.3	56.0	
47,849.2	-729.3	-729.3	56.0	
48,129.6	-734.3	-734.3	56.0	
48,409.0	-739.3	-739.3	56.0	
48,689.4	-744.3	-744.3	56.0	
48,969.8	-749.3	-749.3	56.0	
49,249.2	-754.3	-754.3	56.0	
49,529.6	-759.3	-759.3	56.0	
49,809.0	-764.3	-764.3	56.0	
50,089.4	-769.3	-769.3	56.0	
50,369.8	-774.3	-774.3	56.0	
50,649.2	-779.3	-779.3	56.0	
50,929.6	-784.3	-784.3	56.0	
51,209.0	-789.3	-789.3	56.0	
51,489.4	-794.3	-794.3	56.0	
51,769.8	-799.3	-799.3	56.0	
52,049.2	-804.3	-804.3	56.0	
52,329.6	-809.3	-809.3	56.0	
52,609.0	-814.3	-814.3	56.0	
52,889.4	-819.3	-819.3	56.0	
53,169.8	-824.3	-824.3	56.0	
53,449.2	-829.3	-829.3	56.0	
53,729.6	-834.3	-834.3	56.0	
54,009.0	-839.3	-839.3	56.0	
54,289.4	-844.3	-844.3	56.0	
54,569.8	-849.3	-849.3	56.0	
54,849.2	-854.3	-854.3	56.0	
55,129.6	-859.3	-859.3	56.0	
55,409.0	-864.3	-864.3	56.0	
55,689.4	-869.3	-869.3	56.0	
55,969.8	-874.3	-874.3	56.0	
56,249.2	-879.3	-879.3	56.0	
56,529.6	-884.3	-884.3	56.0	
56,809.0	-889.3	-889.3	56.0	
57,089.4	-894.3	-894.3	56.0	
57,369.8	-899.3	-899.3	56.0	
57,649.2	-904.3	-904.3	56.0	
57,929.6	-909.3	-909.3	56.0	
58,209.0	-914.3	-914.3	56.0	
58,489.4	-919.3	-919.3	56.0	
58,769.8	-924.3	-924.3	56.0	
59,049.2	-929.3	-929.3	56.0	
59,329.6	-934.3	-934.3	56.0	
59,609.0	-939.3	-939.3	56.0	
59,889.4	-944.3	-944.3	56.0	
60,169.8	-949.3	-949.3	56.0	
60,449.2	-954.3	-954.3	56.0	
60,729.6	-959.3	-959.3	56.0	
61,009.0	-964.3	-964.3	56.0	
61,289.4	-969.3	-969.3	56.0	
61,569.8	-974.3	-974.3	56.0	
61,849.2	-979.3	-979.3	56.0	
62,129.6	-984.3	-984.3	56.0	
62,409.0	-989.3	-989.3	56.0	
62,689.4	-994.3	-994.3	56.0	
62,969.8	-999.3	-999.3	56.0	
63,249.2	-1004.3	-1004.3	56.0	
63,529.6	-1009.3	-1009.3		

STATION ALTITUDE 4200 FT  
1 JULY 24 1962 MDT  
ACCELERATION NO. 1

UPPER AIR DATA  
196220116  
10

TABLE 30

GEOMETRIC PRESSURE SLYTHTD IN. PFT	TEMPERATURE AT REPORT DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY METER	SPEED OF WIND KNOTS	DIRECTION OF WIND DEGREES(CN)	WIND DATA NOTS	INDEX OF REFRACTION
4200.7	71.7	16.4	35.0	35.0	130.7	12.0	1.0002269
4500.1	77.4	16.2	37.7	37.7	181.5	11.2	1.0002261
4800.4	72.1	11.5	40.1	40.1	152.2	10.4	1.0002277
5100.5	44.7	11.2	42.9	42.9	135.7	9.6	1.0002273
5200.1	33.4	12.2	45.7	45.7	157.6	8.8	1.0002275
5500.9	21.7	10.4	48.6	48.6	192.5	8.1	1.0002276
5700.0	791.9	25.1	50.2	51.2	234.7	5.8	1.0002242
5800.2	775.1	16.3	50.2	54.0	226.7	6.0	1.0002253
6000.0	764.0	17.3	50.7	56.7	248.3	5.1	1.0002254
6500.5	751.1	19.5	50.5	59.8	259.5	5.5	1.0002251
7000.3	737.5	15.3	50.3	57.0	235.1	7.2	1.0002247
7500.3	784.7	14.3	50.3	55.7	232.5	7.5	1.0002244
7700.2	711.7	13.7	50.3	58.1	251.4	7.2	1.000224
8000.0	599.0	13.0	50.2	51.2	347.5	7.2	1.000224
8500.0	586.7	11.7	50.2	53.7	325.7	7.7	1.000221
9000.0	572.9	10.4	50.1	56.2	224.5	8.4	1.0002117
9500.0	561.6	9.1	50.1	58.7	277.4	7.5	1.0002116
10000.0	645.6	7.9	50.1	51.2	302.3	5.8	1.0002110
10500.0	577.5	6.5	50.2	52.7	354.3	2.5	1.0002110
11000.0	525.2	5.3	50.2	56.6	232.7	7.5	1.0002116
11500.0	522.9	4.1	50.1	58.2	330.7	3.7	1.0002113
12000.0	614.8	4.0	50.1	58.7	317.3	5.8	1.0002113
12500.0	593.2	2.0	50.2	50.7	258.2	6.6	1.0002111
13000.0	596.0	1.3	50.3	52.5	264.9	3.4	1.0002119
13500.0	591.3	0.4	50.3	55.1	232.7	3.1	1.0002113
14000.0	572.1	-0.4	50.4	56.5	232.7	3.1	1.0002113
14500.0	517.0	-1.3	50.4	70.5	226.2	5.7	1.0002113
15000.0	516.7	-1.3	50.3	78.3	216.3	5.3	1.0002117
15500.0	548.0	-0.7	50.2	74.7	203.7	5.0	1.0002117
16000.0	578.3	-2.2	50.3	87.5	492.7	5.4	1.0002115
16500.0	526.8	-1.1	50.4	71.1	227.3	6.9	1.0002111
17000.0	517.0	-1.1	50.4	76.3	55.2	3.2	1.0002113
17500.0	517.0	-1.1	50.4	78.0	57.1	5.7	1.0002117
18000.0	517.0	-1.1	50.4	75.3	53.3	5.7	1.0002113
18500.0	517.0	-1.1	50.4	75.3	52.7	5.5	1.0002113
19000.0	517.0	-1.1	50.4	71.2	203.7	5.0	1.0002113
19500.0	517.0	-1.1	50.4	71.2	145.7	5.4	1.0002115
20000.0	517.0	-1.1	50.4	71.2	125.5	5.4	1.0002114
20500.0	517.0	-1.1	50.4	71.2	116.1	5.0	1.0002114
21000.0	517.0	-1.1	50.4	71.2	117.9	5.0	1.0002114
21500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
22000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
22500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
23000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
23500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
24000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
24500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
25000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
25500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
26000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
26500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
27000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
27500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
28000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
28500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
29000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
29500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
30000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
30500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
31000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
31500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
32000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
32500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
33000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
33500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
34000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
34500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
35000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
35500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
36000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
36500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
37000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
37500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
38000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
38500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
39000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
39500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
40000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
40500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
41000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
41500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
42000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
42500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
43000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
43500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
44000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
44500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
45000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
45500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
46000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
46500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
47000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
47500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
48000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
48500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
49000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
49500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
50000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
50500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
51000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
51500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
52000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
52500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
53000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
53500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
54000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
54500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
55000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
55500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
56000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
56500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
57000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
57500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
58000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
58500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
59000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
59500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
60000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
60500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
61000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
61500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
62000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
62500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
63000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
63500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
64000.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
64500.0	517.0	-1.1	50.4	71.2	120.5	5.4	1.0002114
65000.0							

STATION ALTITUDE 6,115 FEET MSL  
AS CROWN 1.  
AIRCRAFT 1319 MDT

UPPER AIR DATA  
1000 900 800 700 600 500 400 300 200 100  
SFC 54.25 54.45 54.65 54.85 55.05 55.25 55.45 55.65 55.85 56.05 56.25  
LON 131.12 131.12 131.12 131.12 131.12 131.12 131.12 131.12 131.12 131.12 131.12  
LAT 34.22 34.22 34.22 34.22 34.22 34.22 34.22 34.22 34.22 34.22 34.22

TABLE 30 Cont'd

GEOMETRIC PRESSURE PSI	ATMOSPHERIC PRESSURE PSI	TEMPERATURE DEGREES CENTIGRADE	REFRACTION INDEX N <sub>D</sub>	DENSITY G/CU FT	SPEED OF SOUND KNOTS	DIRECTION DEGREES (T) DEGREES (R)	SPEED OF WIND KNOTS	AFFINITY INDEX	LAYER
2600.0	417.6	-15.0	1.003	562.5	527.5	133.125	1.0	1.0	1
2450.0	407.3	-15.0	1.002	552.4	525.8	133.125	1.0	1.0	1
2350.0	381.1	-15.0	1.001	544.3	524.2	133.125	1.0	1.0	1

STATION ALTITUDE 4,131.6 MFT  
2 JULY 1955  
ASCENSION NO. 14

MANOMETRIC LEVELS

154020Z114

ACW

SATELLITE COORDINATES  
32°57'20.9 LAT  
106.29433 LONG

TABLE 31

PRESSURE (MB)	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE CLIMATIC DEGREES CENTIGRADE	DELTUM SERVICE DEGREES (FM)	WIND DIRECT DEGREES (FM)	WIND SPEED SICN (MPH)
951.0	6975.	25.2	11.5	40.	137.1	10.5
916.0	5715.	21.1	10.2	50.	128.3	7.5
761.0	5535.	15.2	9.5	50.	271.0	5.7
721.0	12452.	13.1	3.2	51.	322.1	7.2
701.0	12457.	7.9	-9	51.	2.3	3.1
651.0	14663.	2.4	-2	35.	42.7	0.9
630.0	15713.	-2.1	-5.2	75.	31.1	5.1
591.0	19756.	-5.9	-10.9	75.	317.5	5.3
451.0	22277.	-9.5	-21.9	35.	251.3	3.3
401.0	25025.	-15.2	-28.9	37.		

END

FILED